



Calhoun: The NPS Institutional Archive

DSpace Repository

Theses and Dissertations

1. Thesis and Dissertation Collection, all items

2006-06

HIV/AIDS prevention in Zambia a preliminary study of obstacles to behavior change in the copperbelt

Nyerges, Jana Ramona Alley

Monterey California. Naval Postgraduate School

http://hdl.handle.net/10945/2810

Downloaded from NPS Archive: Calhoun



Calhoun is the Naval Postgraduate School's public access digital repository for research materials and institutional publications created by the NPS community. Calhoun is named for Professor of Mathematics Guy K. Calhoun, NPS's first appointed -- and published -- scholarly author.

> Dudley Knox Library / Naval Postgraduate School 411 Dyer Road / 1 University Circle Monterey, California USA 93943

http://www.nps.edu/library



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

HIV/AIDS PREVENTION IN ZAMBIA: A PRELIMINARY STUDY OF OBSTACLES TO BEHAVIOR CHANGE IN THE COPPERBELT

by

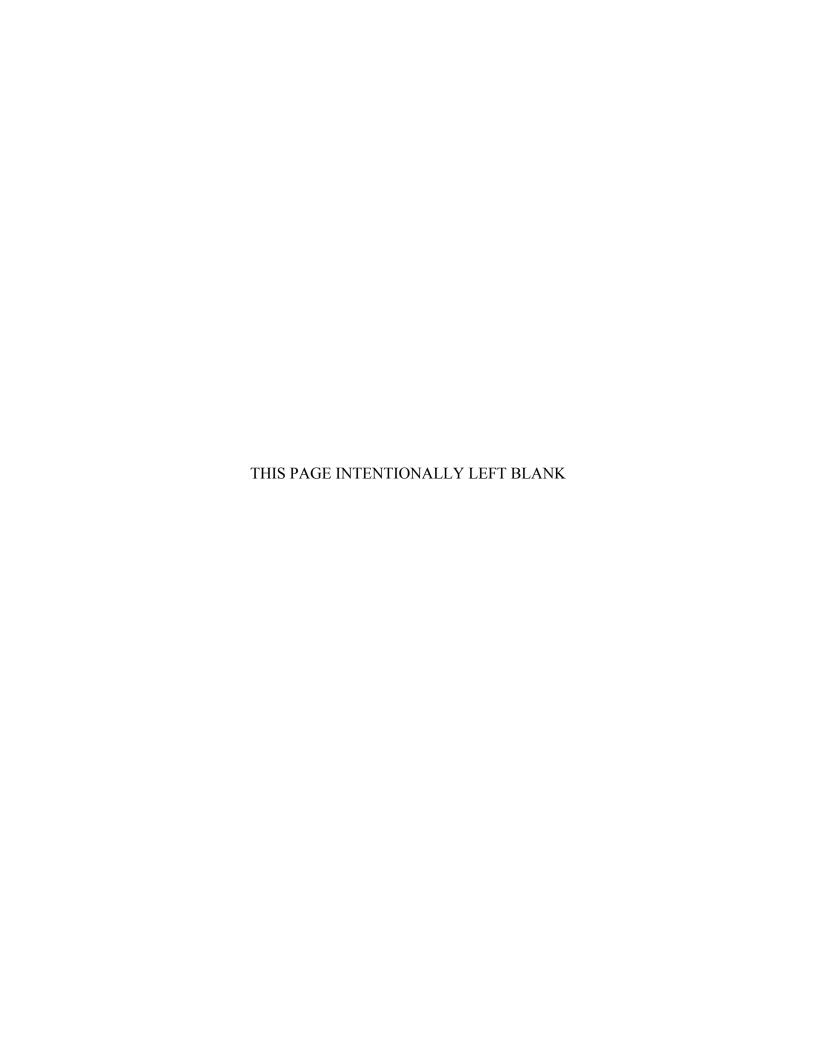
Jana Ramona Alley Nyerges

June 2006

Thesis Co-Advisors:

Letitia Lawson Jessica Piombo

Approved for public release; distribution is unlimited.



REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
1. AGENCY USE ONLY (Leave blank)	ENCY USE ONLY (Leave blank) 2. REPORT DATE June 2006 3. REPORT DATE		PORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE Hiv/Aids Prevention in Zambia: A Preliminary Behavior Change in the Copperbelt	Study of Obstacles to		5. FUNDING NUMBERS	
 6. AUTHOR(S) Jana Ramona Alley Nyerges 7. PERFORMING ORGANIZATION NAME(S) Naval Postgraduate School Monterey, CA 93943-5000 	AND ADDRESS(ES)		8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A		10. SPONSORING/MONITORING AGENCY REPORT NUMBER		
11. SUPPLEMENTARY NOTES The views exproor position of the Department of Defense or the U.S.		se of the	author and do not reflect the official policy	
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.		12b. DISTRIBUTION CODE A		
13 ARSTDACT (movimum 200 words)				

Since the nineteen-eighties, HIV prevention programs around the world have continuously expanded in attempts to meet challenges in the fight against HIV/AIDS. These programs are generally based on primary prevention, which uses Information Education and Communication (IEC) to modify individual behavior. In Africa, as in many underdeveloped countries, various country-specific studies report that a majority of the population is knowledgeable about HIV/AIDS, and how to prevent transmission. Yet while studies show a relatively strong link between education and behavior modification in developed countries, that link appears to be much weaker in less developed regions, including Africa. The literature identifies social and economic factors, especially gender inequalities and poverty, as significant obstacles to behavior change. This thesis assesses the impact of these factors in the Copperbelt region in Zambia, finding significant evidence that both social and economic factors operate as fundamental obstacles to behavior change. These findings suggest that HIV interventions need to go beyond IEC to deal with broader community development challenges. Gender imbalances play a particularly large role, and the findings suggest a desperate need for gender specific interventions targeting men.

14. SUBJECT TERMS HIV, AIDS, Prevention, Copperbe economic, social, gender, interven	15. NUMBER OF PAGES 88 16. PRICE CODE		
17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	UL

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89) Prescribed by ANSI Std. 239-18 THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited.

HIV/AIDS PREVENTION IN ZAMBIA: A PRELIMINARY STUDY OF OBSTACLES TO BEHAVIOR CHANGE IN THE COPPERBELT

Jana RA Nyerges Captain, United States Air Force B.A., University of Arizona, 1999

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF ARTS IN NATIONAL SECURITY AFFAIRS

from the

NAVAL POSTGRADUATE SCHOOL June 2006

Author: Jana Ramona Alley Nyerges

Captain, United States Air Force

Approved by: Dr. Letitia L. Lawson

Thesis Co-Advisor

Dr. Jessica R. Piombo

Co-Advisor

Douglas Porch

Chairman, Department of National Security Affairs

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

Since the nineteen-eighties, HIV prevention programs around the world have continuously expanded in attempts to meet challenges in the fight against HIV/AIDS. These programs are generally based on primary prevention, which uses Information Education and Communication (IEC) to modify individual behavior. In Africa, as in many underdeveloped countries, various country-specific studies report that a majority of the population is knowledgeable about HIV/AIDS, and how to prevent transmission. Yet while studies show a relatively strong link between education and behavior modification in developed countries, that link appears to be much weaker in less developed regions, including Africa. The literature identifies social and economic factors, especially gender inequalities and poverty, as significant obstacles to behavior change. This thesis assesses the impact of these factors in the Copperbelt region in Zambia, finding significant evidence that both social and economic factors operate as fundamental obstacles to behavior change. These findings suggest that HIV interventions need to go beyond IEC to deal with broader community development challenges. Gender imbalances play a particularly large role, and the findings suggest a desperate need for gender specific interventions targeting men.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTF	RODUCTION	1
	1.1	SOCIAL OBSTACLES TO BEHAVIOR CHANGE	5
	1.2	POVERTY AS AN OBSTACLE TO BEHAVIOR CHANGE	10
	1.3	METHODOLOGY	12
	1.4	THE COUNTRY OF ZAMBIA	16
II.	RESI	EARCH FINDINGS	
	2.1	GENERAL FINDINGS BY LOCATION	24
	2.2	SOCIAL OBSTACLES TO BEHAVIOR CHANGE	27
		2.2.1 Weak Communal Governance Mechanisms	29
		2.2.2 Traditional Sexual Practices	32
	2.3	ECONOMIC OBSTACLES TO BEHAVIOR CHANGE	36
		2.3.1 Poverty	36
		2.3.2 Unemployment	
		2.3.3 The Impact of Alcohol Abuse	37
		2.3.4 Transactional Sex	38
	2.4	PREVENTION PROGRAMS	41
		2.4.1 IEC and Program Backlash	41
		2.4.2 Counseling Factors	43
		2.4.3 The Inadequate Participation of Men	44
	2.5	MISCELLANEOUS RESPONSES	
III.	CON	CLUSION AND RECOMMENDATIONS	51
	3.1	IMPLICATIONS FOR RESEARCHERS	52
		3.1.1 Social and Economic Obstacles to Behavior Change?	53
		3.1.2 Gender-based Interventions: Not Just a Women's Issue	
	3.2	POLICY RECOMMENDATIONS	
APPI	ENDIX	: NUMBERIC ORGANIZATIONAL REFERENCE CHART	59
LIST	OF RI	EFERENCES	61
INIT	IAL DI	STRIBUTION LIST	69

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF FIGURES

Figure 1.	Social Causal Chain	.29
Figure 2.	Economic Causal Chain	.36
Figure 3.	Prevention Program Causal Chain	41

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

Table 1.	Social Responses	35
Table 2.	Economic Responses	
Table 3.	Prevention Program Responses	47
Table 4.	<u>.</u>	

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENTS

There are so many people I have to thank for making this thesis possible. Rather than try and put them in rank order I will just start from the beginning. This thesis could not be possible without the support of my family, in more ways than one. Besides being a motivating force when the process got difficult, my mother and father provided the financial backing when no other government institution would. They truly saw the value in what I was trying to accomplish with this writing, and gave it the priority it needed. I love them both very much and thank them for making this experience possible. Also, I am very lucky to have such a loving and supportive husband during this endeavor. He has lived this entire experience with me, an accomplishment for which he deserves a medal. But my love and devotion for him, and the rest of my life will have to do.

To each and every person I met in Zambia, the list is long and I owe my sincerest gratitude to all of you. I can only hope that I have represented you well with this writing. The memories of my visit are still as fresh as the day I left and certainly not soon to be forgotten. Lt Col Leslie Bryant, Dr. and Mrs. Pandey and family, and Emily Chomba, God bless you for opening your homes and lives during my visit. Each of you made my experience all the richer. My time in Zambia has helped me alter my life's perspective, helped me to truly see the devastating effects of HV/AIDS and the importance of finishing this writing.

Lastly, I wish there was another way to display my gratitude for all the hard work and dedication from the NPS staff. Those at Dudley Knox Library were timely and patient with my 100+ Interlibrary Loan Requests. NPS also has the best in Pam Silva who so patiently worked through my thesis processing with me. Finally, how do I begin to thank my advisors? Dr. Letitia Lawson, I have never had such dedicated support from a professor. Ever! This, as well as your professionalism, promptness, and patience are qualities to be admired and set a high standard in your field. Dr. Piombo, your insights and perspective were more than valuable. Thank you for successfully taking on the task of keeping me on track. Thank you both for ensuring I did my absolute best. Ultimately,

through the support of all, this experience will continue to be a worthwhile contribution to my life and career. Unfortunately, there simply are no words to describe the value in that.

Humbly,

Jana RA Nyerges Captain, United States Air Force

I. INTRODUCTION

Since the nineteen-eighties HIV prevention programs around the world have continuously expanded in attempts to meet challenges in the fight against HIV/AIDS. The earliest programs focused on where HIV/AIDS originated, what groups and behaviors put people at risk, dispelling myths about how the virus is contracted, and informing people about how best to protect themselves from HIV. As the general population became more informed about the virus, programs redirected their messages to high-risk groups. Programs are generally based on primary prevention, which uses Information Education and Communication (IEC) to modify individual behavior. Primary prevention attempts to modify risk behavior by promoting the "delayed onset of sexual debut, sexual abstinence and mutually faithful sexual relationships, as well as by promoting 'safer sex', which include the reduction of the number of sexual partners... [and] the correct use of condoms." In developed countries, these programs were largely successful at arresting the spread of the virus in not much more than a decade.² Studies in the United States have proven that "HIV/AIDS prevention programs protect people by helping them reduce the behaviors that put them at risk for HIV infection. Many people have avoided HIV infection as a result of [these] prevention efforts."³

In Africa, as in many underdeveloped countries, various country-specific studies report that where 20 years ago the virus did not even have a name and there was only conjecture as to how it spread, a majority of the population is now knowledgeable about

¹ P. Mayaud, and D. Mabey. June 2004. Approaches to the control of sexually transmitted infections in developing countries: old problems and modern challenges, *Sexually Transmitted Infections*, 80(3):175.

² Centers for Disease Control. 2004. *HIV Prevention in the Third Decade: Activities of the CDC's Divisions of HIV/AIDS Prevention*. Atlanta, GA: Centers for Disease Control and Prevention. Available at http://www.cdc.gov/hiv/HIV_3rdDecade/default.htm accessed May 2006; Centers for Disease Control, *HIV/AIDS Prevention Research Synthesis Project. Compendium of HIV Prevention Interventions with Evidence of Effectiveness*. (Atlanta, GA: Centers for Disease Control and Prevention; November 1999, Revised 2001.) Available at http://www.cdc.gov/hiv/pubs/hivcompendium/hivcompendium.htm accessed May 2006.

³ CDC, 2004, p. vii.

AIDS, and how to prevent HIV transmission.⁴ Uganda's national HIV/AIDS control program, which developed the ABC (Abstain, Be faithful, or use Condoms) model, is credited not only with reaching virtually 100 percent of the population with basic HIV prevention education but also with lowering Uganda's national HIV prevalence from approximately 15 percent in the early 1990's to 5 percent in 2001.⁵ Their national campaign began in 1986 at the behest of the president,⁶ and studies show that by 1989, virtually the entire country knew of HIV/AIDS, and more than half knew how the virus is transmitted. By 2000, well over 85 percent of Uganda's youth knew of at least one way to protect themselves from HIV.⁷

In light of the apparent success of the ABC model in actually reducing HIV prevalence in Uganda, the United States' new and improved global HIV/AIDS program in 2003 adopted Uganda's ABC approach. The President's Emergency Plan for AIDS Relief (PEPFAR) First Annual Report to Congress in 2005 reported astounding results in its first year. PEPFAR had an initial goal of reaching 47.8 million people in 15 countries with HIV prevention messages and programs by June 2005. By October 2004, the program had already reached 120 million people, 250 percent of its one-year target.8

⁴ A.C. Van Dyk. 2001. Traditional African Beliefs and Customs: Implications For AIDS Education and Prevention in Africa. *South African Journal of Psychology*, 31 (2):60-66; Zenabu Abera. 2003. Knowledge, attitude and behavior (KAB) on HIV/AIDS/STDs among workers in the informal sector in Addis Ababa. *Ethiopian Journal of Health Development*, 17 (1):53-61. Available at http://www.cih.uib.no/journals/EJHD/ejhdv17-no1/ejhdv17-n-1-page51.pdf accessed May 2006.; S.Z. Wiktor; L. Abouya, L., et al. 2004. Effect of an HIV counseling and testing program on AIDS-related knowledge and practices in Tuberculosis clinics in Abidjan, Cote D-Ivoire. *The International Journal of TB and Lung Disease*, 8 (4): 445-450.; V. Slonim-Nevo, L. Mukaka, R. Tembo, AIDS-related Knowledge, Attitudes and Behavior Among Urban Youths in Zambia- Results From A Pilot Study. *International Social Work*, 44 (4): 487.

⁵ USAID. "The ABCs of HIV Prevention". Jan 2004. Available at http://www.usaid.gov/our_work/global_health/aids/News/abcjan04.pdf accessed May 2006.

⁶ Lisa Garbus and Elliot Marseille. 2003. HIV/AIDS in Uganda. AIDS Research Institute, AIDS Policy Research Center; San Fransisco, CA: 26-27. Available at http://ari.ucsf.edu/ARI/policy/profiles/Uganda.doc accessed September 2005.

⁷ Uganda HIV/AIDS Partnership, Uganda Ministry of Health, Uganda AIDS Commission, and MEASURE Evaluation Project. 2004. *AIDS in Africa during the Nineties: Uganda.Young People, Sex, and AIDS in Uganda.* Chapel Hill, NC: MEASURE *Evaluation*, Carolina Population Center, University of North Carolina at Chapel Hill. Available at http://www.cpc.unc.edu/measure/publications/pdf/sr-04-27.pdf accessed May 2006.

⁸ State Department. Office of the United States Global AIDS Coordinator. *Engendering Bold Leadership: The President's Emergency Plan for AIDS Relief, First Annual Report to Congress.* March 4, 2005. Available at http://www.state.gov/documents/organization/43885.pdf accessed May 2006.

Thus, this new international education effort appears to be giving a significant new boost to the previous successes of HIV prevention programs.

Yet while studies show a relatively strong link between education and behavior modification in developed countries, that link appears to be much weaker in less developed regions, including Africa. Since the ABC model seems so sound, and many studies conclude that it works, why is it that IEC has not been linked to significant sexual behavior modification in Africa? Research suggests that many complex factors affect sexual behavior in developing countries. Socioeconomic status, weak state infrastructure and resource scarcity all have been identified as playing a role; in addition, less concrete factors such as social norms, stigmatization, traditional practices, and gender inequalities

⁹ Centers for Disease Control, HIV/AIDS Prevention Research Synthesis Project. Compendium of HIV Prevention Interventions with Evidence of Effectiveness. Atlanta, GA: Centers for Disease Control and Prevention; November 1999, Revised 2001. Available at http://www.cdc.gov/hiv/pubs/hivcompendium/hivcompendium.htm accessed May 2006; Daniel T. Halperin, Markus J. Steiner, Michael M. Cassell, et al. 2004. The Time Has Come For Common Ground on Preventing Sexual Transmission of HIV, Lancet, Vol 364; 1913-1915; T.K. Logan, Jennifer Cole, Carl Leukefeld. 2002. Women, Sex, and HIV: Social and Contextual Factors, Meta-Analysis of Published Interventions, and Implications for Practice and Research, Psychological Bulletin, Vol 128 (6): 851-885; K. Macintyre, N. Rutenberg, L. Brown, et al. 2004. Understanding Perceptions of HIV Risk Among Adolescents in KwaZulu-Natal, AIDS AND BEHAVIOR, 8 (3): 237-250, accessed August 2005.

have also been identified as having an impact on HIV prevention efforts.¹⁰ Logan, Cole, and Leukefeld argue that current risk behavior models do not consider such social and contextual factors, and that inducing behavior change requires placing individual-level education within the greater framework of these factors.¹¹ Taken as a whole, the impact of these factors on behavior change is evidence that the IEC model is not able to induce behavior modification because the social environment presents obstacles to behavior

¹⁰ S. Agha. 2002. Declines in Casual Sex in Lusaka, Zambia: 1996-1999. AIDS, 16 (2): 291-293; E. Slaymaker, B. Buckner. 2004. Monitoring Trends in Sexual Behaviour in Zambia, 1996-2003. Sexually Transmitted Infections, 80 (Sup 2): 85-90; Samantha Willan. 2002. "Women's Empowerment": Africa's AIDS Vaccine? AIDS Analysis Africa, 12 (4): 1-20; Tony Barnett and Alan Whiteside. June 2002. Poverty and HIV/AIDS: Impact, Coping and Mitigation Policy in AIDS, Public Policy and Child Well-Being (Florence; UNICEF-IRC); UN Millenium Project. 2005. Combating AIDS in the Developing World. Task Force on HIV/AIDS, Malaria, TB, and Access to Essential Medicines, Working Group on HIV/AIDS: 2; Paul Farmer. 2001. Community-Based Approaches to HIV Treatment in Resource-Poor Settings, Lancet, Vol 358: 404-409; UNAIDS, "AIDS: Epidemic Update", December 2004, Available at http://www.unaids.org/wad2004/EPIupdate2004 html en/epi04 00 en.htm accessed August 2005; State Department. Office of the United States Global AIDS Coordinator. The President's Emergency Plan for AIDS Relief: US Five-Year Global HIV/AIDS Strategy. February 23, 2004. Available at http://www.state.gov/documents/organization/29831.pdf accessed May 2006; Willan, 2002; Hortensia Amaro, (1995) Love, Sex, and Power: Considering Women's Realities in HIV Prevention American Psychologist, Vol 50, 6: 437-447; T.K. Logan, Jennifer Cole, Carl Leukefeld. 2002. Women, Sex, and HIV: Social and Contextual Factors, Meta-Analysis of Published Interventions, and Implications for Practice and Research, Psychological Bulletin, Vol 128 (6): 851-885; Brendan Maughn Brown. Measuring HIV/AIDS Stigma (University of Cape Town: Center for Social Science Research, AIDS and Society Research Unit, August 2004); K. Macintyre, N. Rutenberg, L. Brown, et al. 2004. Understanding Perceptions of HIV Risk Among Adolescents in KwaZulu-Natal, AIDS AND BEHAVIOR, 8 (3): 237-250 accessed August 2005; K. Macintyre, L. Brown, S. Sosler. 2001. "It's not what you know, but who you knew": Examining the Relationship Between Behavior Change and AIDS Mortality in Africa. AIDS Education And Prevention, 13 (2): 160-174; Quentin Gausset. 2001. AIDS and Cultural Practices in Africa: The Case of the Tonga (Zambia), Social Science & Medicine, Vol 52: 509-518; Sharon LaFraniere. 11 May 2005. AIDS Now Compels Africa to Challenge Widows' Cleansing. New York Times; Mark Schoofs, 1999. "AIDS: The Agony of Africa", The Village Voice. Available at http://www.villagevoice.com/specials/africa/ accessed June 2005; A.C. Van Dyk. 2001. Traditional African Beliefs and Customs: Implications For AIDS Education and Prevention in Africa. South African Journal of Psychology, 31 (2):60-66; Carmen Barroso. 2005. Gender, Youth, and AIDS. United Nations Division for the Advancement of Women. Available at http://www.un.org/womenwatch/daw/egm/bpfamd2005/experts-papers/EGM-BPFA-MD-MDG-2005-EP.4.pdf accessed May 2006; Ann K. Blanc. 2001. The Effect of Power in Sexual Relationships on Sexual and Reproductive Health: An Examination of the Evidence, Studies in Family Planning, Vol 32 (3): 189-213; Janet Fleischman, Breaking The Cycle: Ensuring Equitable Access to HIV Treatment for Women and Girls (Washington DC: Center for Strategic and International Studies, February 2004); Kristin L. Dunkle, Rachel K. Jewkes, et al. 2004. Gender-Based Violence, Relationship Power, and Risk of HIV Infection in Women Attending Antenatal Clinics in South Africa, Lancet, Vol 363, Issue 9419: 1415-1421; Laurie A. Smith. 2003. Partner Influence on Noncondom Use: Gender and Ethnic Differences, The Journal of Sex Research, Vol 40 (4): 346-350; Daniel Whelan. 1999. Gender and HIV/AIDS: Taking Stock of Research and Programs. Geneva: UNAIDS; Mark Schoofs, 1998. The Deadly Gender Gap; Fighting AIDS in Africa Means Convincing Men to Take Responsibility for What is Often Thought of as A Woman's Disease. http://www.thebody.com/schoofs/gender gap.html accessed May 2006; Daniel T. Halperin et al. 2004. The Time Has Come For Common Ground On Preventing Sexual Transmission of HIV, Lancet, Vol 364: 1913-1915.

¹¹ T.K. Logan, J. Cole, C. Leukefeld. 2002.

change that IEC does not address. The two sets of factors most often seen as the primary obstacles to behavior change are traditional/cultural practices and poverty.

1.1 SOCIAL OBSTACLES TO BEHAVIOR CHANGE

Many researchers argue that such factors as tradition, culture, gender and social norms play a large role in negotiating sexual practices and behavior change toward safer sexual practices. However, the absence of standardized definitions of terms within this body of literature makes assessment of specific factors within the social realm difficult. For example, Tylor's definition of culture as "that complex whole which includes knowledge, belief, morals, law, custom, and any other capabilities and habits acquired by man as a member of society," remains widely cited. However, in the context of AIDS, Gausset prefers Nanda's definition, which is "the patterned way of life shared by a group of people." Logan et al further complicate the definition of culture within the context of AIDS by stating

The higher rates of HIV among African American and Hispanic women suggest that culture may be important when considering risk [behavior]. *Social and cultural norms* are defined as the beliefs, values, and practices of a specific group. Social and cultural norms often influence many different behaviors including the behavior of men and women in interpersonal relationships.¹⁴

Their study goes on the state that American minority cultures, arguably similar to the underdeveloped countries where they originated, "tend to hold traditional... attitudes toward gender roles, including acceptance of a greater level of sexual promiscuity for men and boys" implying that sexual promiscuity for men can be considered a social norm. Yet even the definitions of a social norm and culture as are used in the above statement are continuously disputed.

¹² E. Tylor. 1871. Primitive culture, (London: John Murray); 1.

¹³ S. Nanda. 1987. *Cultural anthropology*, (Belmont, CA: Wadsworth): 68. As sited in Quentin Gausset. 2001. AIDS and Cultural Practices in Africa: The Case of the Tonga (Zambia), *Social Science & Medicine*, Vol 52: 510.

¹⁴ Logan et al, 852.

¹⁵ Logan et al, 852.

Given the conflicting definitions of the terms used in this literature, quotations will be used to identify terms as they are used in individual sources and I will use the term *social factors* as a general way of referring to them all. A social factor thus is defined as any social behavior derived from past practices or recently adopted which is currently in practice and is generally accepted by a society. A social factor may not necessarily agree with the beliefs, values, and morals of the society in which it is carried out, but reflects only the adaptation and possible reluctant acceptance of behavior due to imposing environmental or economical factors.

One thing that is clear in much of the literature is that many social factors rest squarely on gender boundaries between men and women, and are considered to be problematic obstacles to individual behavior change. The focus of this literature addresses those social factors that have a primary impact on women, many on those pertaining to their subservience to men as well as those that put them most at risk of infection. Authors point to such areas of particular concern to HIV prevention in Africa as the strict discouragement of open sexual discussion and the overall lack of decision-making power for most women in relationships.¹⁶

In some parts of Africa, marriage itself is strongly perceived to be a risk factor as women feel they can not take preventative measures because the "laws of marriage" dictate never challenging or refusing their husbands for fear of violent reprisals or divorce -- an option not acceptable to those women dependent on their marriage for survival.¹⁷ The literature puts forth that other "traditional practices" posing a greater risk to women than men include dry sex, widow inheritance, widow cleansing, and hospitality sex. Misperceptions about the actual benefits of these practices are considered harmful, placing women at increased risk for HIV infection.¹⁸

¹⁶ Willan, p. 11; Ministry of Health, Zambia. 1997. *HIV/AIDS in Zambia: Background, Projections, Impacts and Interventions* (Lusaka: Ministry of Health), as referenced by Baylies, p. 162; Gausset, p. 515.

¹⁷ Baylies, p. 165-166, 168; Willan, p. 9; Whelan, p. 16.

¹⁸ Van Dyk, p. 9; Whelan, p. 10; J.R.S. Mulango. 2001. Sexual Cleansing (Kusalazya) and Levirate Marriage (Kunjilila mung'anda) In the Era of AIDS: Changes in Perceptions and Practices in Zambia. *Social Science & Medicine*, 53 (3): 371-382.

Men are also targeted in this literature, but on a different basis: that of their promiscuity and their reluctance to seek out sexual education. Where women are seen to be unable to insist on monogamy and to resist exploitive sexual relationships, men are supposedly expected and condoned to have multiple sexual partners. Logan's statements concerning male promiscuity are supported by others as well. Blanc and Willan's studies add that socially accepted "encouragement" of multiple partners among men as an indication of manliness contributes to high-risk behavior due to wide-spread beliefs that men are programmed biologically to require sexual activity with multiple partners. ¹⁹ Furthermore, some argue that African society's "traditional tenets," such as abstinence during pregnancy and sometimes up to two years postpartum, are contributing to men's seeking sex outside of marriage. ²⁰

Blanc and Whelan both cite the "gender norm" that men should know more about sex than women because ignorance is construed as weakness. This discourages men from seeking out information about HIV prevention for fear of looking uniformed, and the assumption that they are self-reliant along with fears of reprisal for questioning a man discourages women from seeking the same.²¹ Recent studies reveal an increasing awareness regarding male behavior and more fundamental factors impeding their behavior modification. Several scholars contend African men's ability to bring about change is constrained not only by such common misperceptions regarding HIV in general, but more specifically by societal influence concerning masculinity, promiscuity, manhood, and condom use.²²

Overall, the suggestion is that social factors and traditional practices generally reflect social norms concerning appropriate roles of men and women. These norms lead to individual behaviors of men and women interacting with one another to create

¹⁹ Blanc, p. 199; L. Walker and L. Gilbert. 2002. HIV/AIDS: South African women at risk. Journal of AIDS Research, 1: 75-85, as referenced by Willan, p. 11.

²⁰ T. Lawoyin. Men make a difference. Culture, HIV/AIDs and Men's risks and responsibilities, Ibadan, Nigeria, University College Hospital, College of Medicine. Working Paper available at http://www.scholar.google.com/url?sa=U&q=http://www.dakar.unesco.org/pdf/010808_communication12.pdf accessed May 2006.

²¹ Blanc, p. 199; Whelan, p. 9.

²² Ndubani, p. 110; Whelan, p. 12; Blanc, p. 199.

environments in which high risk behavior is entrenched, and not readily responsive to HIV education programs. Within the context of sexual relationships scholars demonstrate that the socially and culturally defined gender roles of men *and* women, and individual perceptions surrounding their ability to negotiate safe sex practices, limit actual behavior modification.²³

Most of these studies focus on women, and conclude that since women are the oppressed gender and bear most of the repercussion, they should be targeted for gender specific prevention programs. Therefore, scholars conclude that educating women about ways in which they can implement safer sexual practices (e.g., use of female condoms) and facilitating their empowerment (e.g., through utilizing partner negotiation skills and overall socio-economic development) is the way to succeed in HIV prevention.²⁴ There is much less attention devoted to those factors impeding behavioral change in men, beyond simple statements that men are uninformed about HIV and oppress women.²⁵ Yet, while female empowerment is a valuable preventative intervention, it cannot be the only answer. "[M]en too need to realize that women alone cannot and should not carry the burden."²⁶ In fact, some scholars argue that changing men's sexual behavior is more crucial to breaking the AIDS epidemic.²⁷

This literature is also just beginning to show signs of addressing the gender bias toward women, acknowledging the impact of poverty on men in the context of HIV/AIDS. In a report published by the World Bank in 2005, Barker and Ricardo note that in Africa, gender often "exclusively refers to the disadvantages that women and girls

²³ Amaro, 1995; Gausset, 2001; Whelan, 1999; E.G. Benotsch et al. 2004. HIV Prevention in Africa: Programs and Populations Served by Non-Governmental Organizations. *Journal of Community Health*, 29 (4): 319-336.

²⁴ Amaro, 1995; Willan, 2002; D. Albarracin, G.T. Kumkale, B.T. Johnson. 2004. Influences of Social Power and Normative Support on Condom Use Decisions: A Research Synthesis, *AIDS CARE*, Vol 16 (6): 700-723.

²⁵ G.W. Dowsett, 2003. Some Considerations on Sexuality and Gender in the Context of AIDS, *Reproductive Health Matters*, 11(22): 27.

²⁶ Willan, p. 14; Gausset, p. 515.

²⁷ Baylies, p. 161.

face.... gender mainstreaming ha[s] too often ignored the gender of men and boys."²⁸ While much is known about the roles of women in African societies, what makes a man in Africa? According to Barker and Ricardo "The chief mandate or social requirement for achieving manhood in Africa- for being a man- is achieving some level of financial independence, employment or income, and subsequently starting a family."²⁹ Their study attempts to demonstrate that much of the problematic behaviors of men, such as those discussed here and the previous section, are directly related to socially defined determinants of male identity similar to the ones previously discussed herein.

Barker and Ricardo further argue that the men of Sub-Saharan Africa are aware that the socially accepted perceptions of masculinity are changing in the wake of HIV/AIDS, causing many to question their previously unquestionable views of manhood in their society. They contend that HIV/AIDS has devastated society to the extent that men are now taking on roles previously reserved strictly for women; further arguing that such changes in gender roles as care-giving and orphan child rearing have thus left men "vulnerable," often curtailing their education opportunities. However, Barker and Ricardo do not directly address how the lack of work (admittedly of significant social as well as economic value to men) affects male perceptions of masculinity and can thereby translate to risk behavior for HIV infection.

Several researchers argue that the emphasis placed on women as the principle target of redesigned prevention programs is problematic.³¹ One-sided gender-based interventions are less likely to be successful in facilitating behavior change.³² These further argue that targeting men, who have all the sexual power, would greatly complement those elements of prevention programs targeting women. However,

²⁸ G. Barker and C. Ricardo. June 2005. *Young Men and the Construction of Masculinity in Sub-Saharan Africa: Implications for HIV/AIDS, Conflict, and Violence*. The World Bank Social Development Papers, #32712, v.

²⁹ Barker and Ricardo, 5.

³⁰ Barker and Ricardo, 44.

³¹ Whelan, 1999; Blanc, 2001; Willan, 2002; Dunkle, 2004; Fleichman, 2004.

³²Encouraging women to reject their subordination, in the absence of parallel interventions with men, may also lead to an increase in gender-based violence. Schoofs, 1995; Schoofs, 1998; UNAIDS, 2004; PEPFAR, 2003 and 2005.

regardless of whether the study focuses on men or women, the recommendations often tend to focus mostly on women. HIV/AIDS has social implications that affect men and women equally, just as both face obstacles to behavior change. It therefore would be only logical to consider how the social and economic environment impacts men. Even as more studies are beginning to pay attention to men, there continues to be a significant gap in the literature about how social factors constrain male behavior change and how to target men with HIV prevention interventions- a gap which this research hopes to contribute to filling.

1.2 POVERTY AS AN OBSTACLE TO BEHAVIOR CHANGE

Some scholars contend there is bidirectional causation between poverty and HIV and that "the causal chain runs from macro-factors that result in poverty: [sic] through the community, the household, the individual and into the resilience of the individual's immune system." Barnett and Whiteside argue the physiological conditions caused by poverty, such as malnutrition and other deficiencies, increase susceptibility to HIV infection. The "bidirectionality" of their arguments comes from the fact that HIV/AIDS also impoverishes people, households and communities due to illness and death. Flores and Gillespie also argue that "[p]overty increases the exposure to, as well as the impact of, HIV/AIDS. It diminishes the perceived value of avoiding HIV/AIDS ("we will die soon anyway"), increases the relative costs of preventing and treating the illness, and worsens the impact of weakened immunity because it commingles with a more hostile bacterial and viral environment."

In other words, in general extreme impoverished conditions lead to malnutrition and a physical inability to resist HIV infection. Others add that poor socio-economic

³³ Rafael Flores and Stuart Gillespie. 2001. *Health and Nutrition: Emerging and Reemerging Issues in Developing Countries*, 2020 vision focus 5, International Food Policy Research Institute (IFPRI); Lisa Garbus. March 2003. *HIV/AIDS in Zambia*. AIDS Policy Research Center, University of California San Fransisco, 24 available at http://ari.ucsf.edu/programs/policy/countries/Zambia.pdf accessed May 2006; Tony Barnett and Alan Whiteside. June 2002. *Poverty and HIV/AIDS: Impact, Coping and Mitigation Policy in AIDS*, Public Policy and Child Well-Being (Florence; UNICEF-IRC): 2.

³⁴ Barnett and Whiteside, p. 3.

³⁵ Rafael Flores and Stuart Gillespie. 2001. *Health and Nutrition: Emerging and Reemerging Issues in Developing Countries*, 2020 vision focus 5, International Food Policy Research Institute (IFPRI): 2.

conditions and high levels of unemployment are what move HIV/AIDS beyond just an epidemiological problem to a social one.³⁶ Thus poverty becomes a livelihood problem for entire societies in which HIV can take root; and the risk of HIV infection as well as contraction of the virus reciprocate, lending themselves to poverty. All studies agree that these poverty-related factors therefore impact individuals' ability to make appropriate decisions about safer practices that would protect them from HIV infection.

The literature on the dynamics between poverty and HIV/AIDS often proposes general solutions, such as job creation and better education opportunities.³⁷ When it does address gender-specific economic constraints, it tends to give most of the attention to women. In Africa's rural agrarian economies, both men and women are under extreme economic stress. This contributes to women's engagement in high-risk behavior by encouraging transactional sex for economic gain as one avenue of income typically only open to women.³⁸ Compounded by the fact that unemployment rates are higher for women than men, this presents women with high risk situations which include: "engaging in high-risk sexual activity for financial 'gain', whether as commercial sex workers; [sic] or through becoming involved with 'sugar daddies', or else simply remaining in abusive or unhappy relationships because they do not have the economic resources to leave."³⁹

While the situation has been found to be unhealthy for female-led households, there is also a considerable of literature that contends that it is not much better for women whose husbands are in the household. Marriage may provide some security, but "social and economic dependence can constrain wives' attempts to negotiate safe sex with their husbands,"⁴⁰ leaving them vulnerable to HIV because of their marginalized economic

³⁶ K.E. Poundstone, S.A. Strathdee, D.D. Celentano. July 2004. The Social Epidemiology of Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome, *Epidemiologic Reviews*, 26(1): 25-26.

³⁷ F. le R. Booysen. 2003. *HIV/AIDS and Poverty Dynamics*. Department of Economics, RSA, Working Paper 01/03: 1.

³⁸ Willan, p. 8; Blanc, p. 199.

³⁹ Samantha Willan. 2002. "Women's Empowerment": Africa's AIDS Vaccine? *AIDS Analysis Africa*, 12 (4): 8.

⁴⁰ Willan, p. 9-10.

status. This claim is further supported by the UNAIDS Report for 2004 which states that gender inequalities are aggravated by lack of income earning opportunity for women.⁴¹

While the previous section on social obstacles to behavior change explored how societal influence concerning masculinity, promiscuity, manhood, and condom use impacted male behavior, how does the inability to meet the economic conditions for masculinity impact behavior? Barker and Ricardo's study focuses on the need to fill the gaps in research and in prevention efforts concerning the impact HIV/AIDS has on men and resultant changes in perceptions of their roles in society, but they fail to provide evidence as to how the inability to meet their defined economic conditions for masculinity impacts male risk behavior.

Ultimately this thesis seeks to understand the dynamics of social factors and poverty on individuals' decisions about adopting safe sexual practices to protect themselves from HIV/AIDS. This understanding may be critical to properly and effectively designing and implementing HIV prevention interventions and initiatives. As the literature review above illustrates, there are many unanswered questions concerning the direct effects poverty and social factors have on immediate decision-making capabilities of young men and women in Sub-Saharan Africa. Several new studies are beginning to emphasize that much is known about how these factors impact almost all aspects of a woman's life, but very little about how the most important aspects of a man's life is impacted; and furthermore how that might be affecting his decisions-making concerning sexual risk behavior. It is this gap my research will address.

1.3 METHODOLOGY

My general research question asks how social and economic factors are presenting obstacles to behavior change in men as well as in women. I hypothesize that both social and poverty factors present particular fundamental obstacles to risk behavior decision making, not just for women as the literature readily illustrates, but for men as well. More importantly, I argue that many of the obstacles women face may be predicated

⁴¹ UNAIDS, 2004, p. 10-11.

on these obstacles to male behavior change, since women are in a weaker position in sexual negotiations with men. If men will not change their behavior, women will not be able to either.

In order to test this hypothesis I undertook a series of field interviews in the Zambian Copperbelt in August 2005. This is a heavy mining region that has been significantly impacted by poverty and severe unemployment, and in which social norms have been influenced both by tradition and modernization. The region is comprised of primarily suburban (peri-urban) and rural communities. I collected data in three locations. Thirteen HIV/AIDS related organizations and individuals were interviewed in Lusaka (the capital), 11 in Ndola, and 15 in Chingola for a total of 39. My objective was to determine what obstacles to behavior change, if any, program implementers believe they face. I began in Lusaka, and then moved into the Copperbelt region. My purpose for meeting with large AIDS organizations in Lusaka was multifold. First, I wanted to introduce myself, tell them why I was there, and let them know that I may be interviewing lower echelons of their organizations as I moved throughout the Copperbelt. Second, I wanted to get the macro-level perspective on what HIV/AIDS prevention was about in Zambia and how they filtered their strategy down to the grassroots. Third, I wanted to know what they believed were the predominant problems affecting individual behavior change in response to HIV/AIDS prevention efforts. This last point was the focus for interviews conducted at all levels.

I then moved into the Copperbelt region towns of Ndola and Chingola to conduct the implementer interviews. Interviews were informal to facilitate free and open communication. They were conducted primarily with organization staff, but some included program volunteers and participants in a group discussion format as well. Most of the interviews in Ndola and Chingola were conducted in Bemba, the common language in the Copperbelt, and were translated during the interviews by my Zambian assistant Emily Chomba. Chomba is a Zambian nurse by trade, and one of the best HIV/AIDS peer educators and counselors at the Konkola Copper Mining (KCM) Company. She was well-known in the area and recognized by all of the organizations we visited from her workshops. She had a great way of communicating all the embarrassing

elements of HIV/AIDS prevention to people without turning them off to the subject, and quickly put people at ease, making discussion of sensitive topics flow much more easily. In Chingola we were met by everyone associated with the organizations that were free to attend. It was very difficult to have small meetings with just the heads for the organizations, but we were ultimately able to keep a majority of the discussions to just the implementers. As such, I primarily conducted group discussions with usually 10-30 implementers (counselors, peer educators, and home based care providers).

My overall sample included international-, NGO-, GRZ- (Government of the Republic of Zambia), and community-sponsored organizations; HBC (Home Based Care), VCT (Voluntary Counseling and Testing) centers, and PLWA (Peoples Living With AIDS) centers; orphanages, schools, youth centers, and traditional educators. The sample is diverse in order to avoid inadvertent selection bias based on types of programs. The interviews were not structured but were based on five fundamental questions to initiate discussion:

- What is the focus of your organization?
- Who is your target audience and how do you conduct outreach?
- Do you perceive any obstacles to individual behavior change amongst program participants?
- How are you addressing these obstacles?
- What are the successes and challenges to your attempts to address those obstacles?

I then facilitated discussions amongst the respondents. In subsequent questioning I avoided raising my variables explicitly, but allowed the respondents to identify them freely. Based on respondents' answers, I created a list of specific obstacles, and tabulated how many programs identified each obstacle. I then sorted these specific obstacles into four general categories as they related to or were considered a direct response to each of the following: social structure, economics, program design, and miscellaneous (see Tables 1 through 4).

The data presented here is intended to gauge grassroots program implementers' perceptions of the obstacles to individual behavior change and whether programs are meeting the particular needs of their participants. I chose to interview program

implementers rather than participants because they are the bridge between the two groups most often involved in studies, those who create and disseminate program designs, and those who participate in the programs themselves. While purely statistical and highly structured scientific studies are important to determining what those needs are, it is equally important to take less a structured approach and ask program implementers in the middle of the process what they believe appropriate interventions should address as they are attempting to implement the programs they are provided. My hope is that interviewing the implementers on the ground in the day-to-day fight against HIV/AIDS will reveal new insight into the obstacles that men and women face in responding to initial intervention efforts, and begin to suggest plausible explanations for why HIV/AIDS prevention efforts at all levels seem not to have their intended impact.

The methodology I chose for collecting the data has some limitations. In an effort to avoid guiding respondents, data was collected during free-flowing discussions usually with several individuals in a group rather than with structured questionnaires or individual surveys. Some variables may have been overlooked for several reasons: either time did not allow for a complete discussion, some respondents may not have felt comfortable speaking about certain variables, and some information could have been lost or misinterpreted in translation. The respondents themselves may be limited to the select experiences they have had thus far and I did not address levels of experience each has had in their respective capacities. Lastly, while key respondent phrases and terminology were selected to create the individual categories provided as responses, the construction of the data set is nonetheless subject to my and my translator's understanding of the discussions held during the interviews.

Finally, the analysis that follows is based on the specific situation in localized areas. It may not apply to other countries, or even all of Zambia. It nevertheless identifies important issues for further research, and for policy consideration. The following section provides an overview of the current status of HIV/AIDS in Zambia. Chapter II provides an overview of HIV/AIDS in Zambia based on the existing secondary literature, and presents an analysis of my data. The final chapter presents conclusions and policy recommendations.

1.4 THE COUNTRY OF ZAMBIA

Zambia, a country of approximately 10 million people, is one of the poorest, least developed countries in the world, and has one of the highest HIV/AIDS prevalence rates. A2 Zambia's health, economic, and social development is affected by the AIDS epidemic as businesses, communities, and families struggle to survive the devastating effects of the virus. According to the 2002 Demographic Health Survey, 15.6 percent of the adult population is living with HIV, with 18 percent of women and 13 percent of men infected. Zambia has the world's lowest estimated life expectancy at birth, 32.4 years. Human Development Report states that based "on current indicators a child born in Zambia today has less chance of surviving past age 30 than a child born in 1840 England."

Seventy three percent of Zambians live below the poverty line. Rural areas are more poverty stricken than urban areas (83 percent and 56 percent respectively), although poverty rates are rising in urban areas due to failing industries and increases in unemployment.⁴⁷ Zambia is divided into nine provinces; of the nine, two are mostly urban and suburban, Lusaka and the Copperbelt provinces.⁴⁸ Zambia's economy is heavily dependent on the mining of copper, cobalt and zinc. Copper is the country's primary export, accounting for 95 percent of export earnings.⁴⁹

⁴² M.T. Mwanamwenge, B. Chilopa, P.M. Chewe, et al. March 2004. Zambia Sexual Behaviour Survey 2003. Republic of Zambia, Central Statistical Office, 1; Garbus, 6; Human Development Index, 2003. Available at http://hdr.undp.org/statistics/data/indicators.cfm?x=1&y=1&z=1 accessed October 2005.

⁴³ Mwanamwenge et al., 24; State Department. Office of the United States Global AIDS Coordinator. *The President's Emergency Plan for AIDS Relief: US Five-Year Strategy for Zambia*. December 2004: 2.

⁴⁴ Garbus, 8. The UNDP Human Development Index 2003 determined life expectancy to be 37.5 years. Data available at http://hdr.undp.org/statistics/data/countries.cfm?c=ZMB accessed May 2006.

⁴⁵ UNDP 2005, 12.

⁴⁶ UNDP 2005, 12.

⁴⁷ Zambian Ministry of Finance and National Planning. Zambia Poverty Reduction Strategy Paper 2002-2004. Lusaka: March 2002.

⁴⁸ Mwanamwenge, M.T et al, 1.

⁴⁹ World Bank. Zambia: Country Brief. August 2001 as sited in Garbus, 32; Mwanamwenge, M.T. et al. 1.

Dramatic drops in the price of copper on the global market in the 1970s, and again in the 1990s, along with lack of investment and uncertainties about privatization led to high rates of unemployment and poverty throughout the Copperbelt.⁵⁰ In 1998, the Copperbelt had the highest concentration of the country's poor.⁵¹ Men who had been skilled laborers in the mining industry were left to seek employment opportunities far away from their homes in other labor-saturated markets. Ultimately those who were not able to find employment returned to their villages. As a result of male unemployment, women and young girls are being taken out of school not just to care for households and ailing family-members (usually both mother and father) but also to work to generate that household's income previously supplied by a man.⁵² While women and girls have always been responsible for the care and feeding of a household, they are now relied upon to a much greater extent to provide the income necessary for maintenance and upkeep of farm and home. This predicament sometimes leaves young uneducated girls little choice but to engage in transactional sex, even outright prostitution in order to sustain those households and farms.

Social factors affecting sexual behavior fall heavily along gender lines in Zambia, as elsewhere. Zambian societies continue to observe many traditional practices which, until the onset of HIV/AIDS, were not considered to be incompatible with safe sex practices. However, in light of the virus many practices, such as levirate marriage (widow/widower inheritance), sexual cleansing, polygamy, circumcision, witchcraft and healing rituals, and dry sex, are now regarded by many as harmful.⁵³ Sexual cleansing requires a widow or widower to have intercourse with on of her (or his) deceased spouse's siblings.⁵⁴ Other acts such as polygamy and dry sex practices impact

⁵⁰ US State Department. September 2005. *Background Note Zambia*. Bureau of African Affairs; Mwanamwenge, M.T. et al, 1; Garbus, 6.

⁵¹ Venkatesh Seshamani. June 2000. *Some Pertinent Considerations in the Formulation of a Poverty Reduction Strategy Paper (PRSP) for Zambia*. Civil Society for Poverty Reduction, Zambia, Table 1.

⁵² Garbus, 7.

⁵³ J.R.S. Mulango. 2001. Sexual Cleansing (Kusalazya) and Levirate Marriage (Kunjilila mung'anda) In the Era of AIDS: Changes in Perceptions and Practices in Zambia. *Social Science & Medicine*, 53 (3): 371-382; Quentin Gausset. 2001. AIDS and Cultural Practices in Africa: The Case of the Tonga (Zambia), *Social Science and Medicine*, Vol 52: 512.

⁵⁴ State Department. Office of the United States Global AIDS Coordinator. *The President's Emergency Plan for AIDS Relief: US Five-Year Strategy for Zambia*. December 2004, 6.

predominantly women increasing their risk of infection. It is commonly thought that polygamous or extramarital sexual practices expose multiple women to HIV/AIDS, while only one man is at risk. Dry sex consists of a woman placing herbs and other substances in the vagina to dry it and make it as hot as possible presumably to increase the sexual pleasure for the man. This increases the risk of transmission of HIV from man to woman.

In addition to these more obvious sexual practices there are those more closely related to a woman's role in society, or female social factors. Women in Zambia are subservient to men and hold very little if any negotiating power in sexual relationships.⁵⁵ As one report noted, "A woman would be beaten if she told her husband to wear a condom."⁵⁶ Women in long-term relationships are prevented from demanding condom usage or denying dry sex due to social norms."⁵⁷ Further, women in Zambia are at a disadvantage legally regarding property ownership, inheritance, and marriage, and they are not permitted to obtain loans from banks.⁵⁸ This "reduces women's economic security and can lead to women having to endure abusive relationships or resort to sex for economic survival," thereby exposing them further to HIV infection.⁵⁹

Most young Zambia men perceive manhood in terms of multiple sexual relationships as a way to reinforce traditional beliefs that men must be sexually vigorous and demonstrate virility.⁶⁰ Zambian men in more rural societies also believe that using condoms affects male potency.⁶¹ While condoms are generally associated with birth control as well as promiscuity and infidelity, in Zambia the latter is more common. Condoms are more likely to be used with prostitutes than by men or women who perceive

⁵⁵ P. Ndubani et al. 2003. Understanding Young Men's Sexual Health and Prospects For Sexual Behaviour Change in Rural Zambia. *Scandinavian Journal of Public Health*, 31 (4): 295.

⁵⁶ C. Baylies. 2004. HIV/AIDS and older women in Zambia: concern for self, worry over daughters, towers of strength. *Global Health And Governance: HIV/AIDS*, Third World Quarterly Series, p. 166.

⁵⁷ State Department. Office of the United States Global AIDS Coordinator. *The President's Emergency Plan for AIDS Relief: US Five-Year Strategy for Zambia*. December 2004, 6.

⁵⁸ Garbus, 28.

⁵⁹ UNAIDS, AIDS Epidemic Update 2004, 17.

⁶⁰ P. Ndubani and B. Hojer. 2001. Sexual Behaviour and Sexually Transmitted Diseases Among Young Men in Zambia. *Health Policy and Planning*, 16 (1): 110; P. Ndubani et al. 2003. Understanding Young Men's Sexual Health and Prospects For Sexual Behaviour Change in Rural Zambia. *Scandinavian Journal of Public Health*, 31 (4): 295.

⁶¹ Ndubani and Hojer, 107; Gausset, 514.

themselves to be in a committed relationship.⁶² As a result condom use continues to be very low in steady relationships; it is higher in non-regular relationships, but still low.⁶³ In steady relationships, 6 percent of men and 5 percent of women reported condom use during their last sexual act; numbers which have not changed since 1998. In comparison, in sexually active unmarried young people ages 15 to 24, 32 percent of men and 28 percent of women reported using a condom during their last sex act.⁶⁴

Among Zambian women between the ages of 15-19, 38 percent reported recently receiving money or gifts in exchange for sex.⁶⁵ One fifth of both men and women reported using alcohol at the time of last intercourse. Alcohol use is a risk factor for early sex, multiple partners over a lifetime, and having multiple partners during the last three months.⁶⁶ These risk factors are also problematic for the fight against HIV/AIDS in Zambia. What these behavioral statistics suggest is that while some prevention is occurring, it is not enough.

HIV/AIDS prevalence in Zambia is significantly higher in the urban and suburban compared to the rural areas, with 23.1 and 10.8 percent respectively.⁶⁷ The highest prevalence rates are in Lusaka (22 percent) and Copperbelt (20 percent) provinces.⁶⁸ There have been some isolated indications of progress in HIV prevalence reduction. Among girls 15-19 in Lusaka, HIV prevalence has been in decline.⁶⁹ This is significant as girls aged 15-24 are three to six times more likely to be infected than young men.⁷⁰ However, there is indeterminate information on prevalence trends in the rural areas,

⁶² Ndubani and Hojer, 111; Gausset, 514.

⁶³ Garbus, 29.

⁶⁴ Garbus, 57.

⁶⁵ Garbus, 30.

⁶⁶ Garbus, 30.

⁶⁷ State Department. Office of the United States Global AIDS Coordinator. *The President's Emergency Plan for AIDS Relief: US Five-Year Strategy for Zambia*. December 2004, 2.

⁶⁸ State Department. Office of the United States Global AIDS Coordinator. *The President's Emergency Plan for AIDS Relief: US Five-Year Strategy for Zambia*. December 2004, 2.

⁶⁹ Garbus, HIV/AIDS in Zambia, 12.

⁷⁰ UNAIDS, AIDS Epidemic Update 2004, 7.

military, or police forces making it difficult to accurately assess whether the overall HIV prevalence trend is increasing or decreasing in Zambia. ⁷¹

While there are signs that prevalence rates may be reaching a plateau, the isolated cases of progress have not resulted in a significant reduction in the country's overall prevalence rates. In fact, in rural areas overall HIV prevalence and HIV prevalence among the youngest age cohort appear to be on the rise. A more specific study of Zambia's Copperbelt region in 1998 found Ndola to have one of the highest HIV prevalence rates, 28.4 percent, up from a 1994 study that reported 27.5 percent.⁷² The complex relationship between poverty and HIV is nowhere more evident than in Ndola.

Current studies indicate a majority of the Zambian population has the information they need to adjust their behavior toward safer sexual practices. Yet no significant behavior change is occurring. The Demographic and Health Survey (DHS) conducted studies in 1996 and 2002, reporting that 99 percent of men and women had heard of AIDS, and in 2002 that 77.9 percent of women and 85.5 percent of men knew of two or more ways of avoiding HIV/AIDS.⁷³ However, a 2003 Zambia policy analysis project found gaps in the understanding of HIV transmission where gender, misperceptions, and suburban differentials are concerned.⁷⁴ As devastating as these statistics are they make Zambia a good representation of the effects of the interactions between poverty, social factors, and HIV/AIDS can have on the populations of countries in the developing world. These reports make Zambia a prime candidate for study concerning developing innovative approaches to HIV/AIDS prevention.

Given that Zambia is one of the countries most severely affected by HIV/AIDS, many international agencies, NGOs, and FBOs (Faith-Based Organizations) are working with the government and community-based organizations to help fight the epidemic. As such, there are many different strategies in place and high risk groups being targeted, allowing for a broad spectrum of interventions to be implemented. UNAIDS is working

⁷¹ Garbus, HIV/AIDS in Zambia, 12.

⁷² Garbus, HIV/AIDS in Zambia, 15.

⁷³ Garbus, HIV/AIDS in Zambia, 51.

⁷⁴ Garbus, HIV/AIDS in Zambia, 8.

in concert with Zambia's National AIDS Council on eight strategic intervention objectives: promotion of behavior change; prevention of MTCT (Mother To Child Transmission); safe blood transfusion; VCT (Voluntary Testing and Counseling); care and support for PLWH (People Living With AIDS); care and support for orphans and vulnerable children; establishing an information database; and coordination of multisectoral interventions at all levels.⁷⁵

The United States' PEPFAR Five-Year Strategy for Zambia lists human capacity development; sustainability and new partnerships; the role of the private sector; stigma and discrimination; gender; and twinning with other institutions as the critical interventions of The Plan. Of note for the purposes of this study are the Stigma and Discrimination and Gender interventions. The Plan's strategy for fighting stigma is to work through the national leadership to stop the fear associated with stigma. Targeting interventions to protect women and encourage male responsibility is the Plan's strategy to address gender constraints. The particular gender interventions include: Abstinence, Be Faithful, Condom use (ABC) education; Life skills training; Reduction in crossgenerational sexual relations; VCT for discordant couples; Parental involvement; Male role models; Reduction in child sexual abuse; Post-exposure prophylaxis for rape; and campaigns targeting high risk males.

The Government of Zambia and most NGO and CBO strategies are based on the interventions put forth by UNAIDS and the United States' strategies. Zambia's National Prevention Strategies include the promotion of safer sexual behavior with the ABC model from Uganda; as well as 'zero grazing' (no sexual relations outside of a regular partnership.⁷⁸ I turn now to the findings for my primary research question, how HIV prevention organizations on the ground perceive obstacles to successful implementation.

⁷⁵ UNAIDS. September 2004. *UNAIDS at Country Level Progress Report*. Country and Regional Support Department, 96.

⁷⁶ State Department. Office of the United States Global AIDS Coordinator. *The President's Emergency Plan for AIDS Relief: US Five-Year Strategy for Zambia*. December 2004, 7.

⁷⁷ State Department. Office of the United States Global AIDS Coordinator. *The President's Emergency Plan for AIDS Relief: US Five-Year Strategy for Zambia*. December 2004, 8.

⁷⁸ Hughes-d'Aeth, A. 2002. Evaluation of HIV/AIDS Peer Education Projects in Zambia. *Evaluation and Program Planning*, 25 (4): 398.

THIS PAGE INTENTIONALLY LEFT BLANK

II. RESEARCH FINDINGS

I begin with some general observations, which are important to this study, but not directly related to my hypothesis. Subsequent sections present the findings based on four categories of perceived obstacles to behavior change in response to HIV education: social factors, economic factors, prevention program flaws, and a category of other miscellaneous obstacles. The data for the four categories are presented in Tables 1 through 4. A total of 183 responses were categorized.

The largest of the four categories is social factors, with a total of 65 recorded responses (36 percent of all responses), followed by economic factors with 49 citations (27 percent of all responses), and prevention program related issues with 32 mentions (17 percent of all responses). The miscellaneous category includes a further 37 responses (20 percent of all responses). 79 At least one social factor was given as an obstacle to behavior change by 82 percent of organizations interviewed (32 of 39), at least one economic obstacle by 62 percent (24 of 39), and at least one program design flaws by 59 percent (23 of 39). At a superficial level, this suggests that social factors are perceived by program implementers to be the most common obstacles to accomplishing behavior change and HIV control, followed by economics, and program design. Most organizations reported obstacles in multiple categories. Four organizations identified only one type of obstacle (10 percent), twelve identified two types (31 percent), sixteen identified three categories (41 percent), and seven noted obstacles in all four categories (18 percent). The fact that 90 percent responded in multiple categories suggests that program implementers generally believe they are facing multiple obstacles to accomplishing their mission of HIV control.

A total of 16 obstacles to behavior change were identified by program implementers in my study. Twelve of the 16 were identified by more than 10 organizations (25% of the total). These are gender roles (21 organizations), weak

⁷⁹ The findings presented here apply to the Copperbelt region of Zambia. They may or may not apply to other parts of Zambia, or other countries in Africa. Further research is required to establish the wider relevance of my findings and conclusions.

leadership/mentoring (16 organizations), transactional sex (16 organizations), poverty (14 organizations), promiscuity (14 organizations), alcohol abuse (13 organizations), negative reinforcement of Information Education and Counseling (EIC) (13 organizations), the inadequate male participation in HIV control programs (12 organizations), HIV/AIDS myths/stigmas (12 organizations), and lack of communal governance mechanisms and lack of communication (11 organizations), and reluctance to use condoms (11 organizations).

2.1 GENERAL FINDINGS BY LOCATION⁸⁰

The organizations interviewed in Lusaka were involved in promoting Abstinence, Being Faithful, and Condom use (ABC),⁸¹ focused on Voluntary Counseling and Testing (VCT),⁸² Prevention of Mother to Child Transmission (PMTCT),⁸³ Anti-retroviral Treatment (ART),⁸⁴ or targeting high-risk groups such as sex workers and truck drivers.⁸⁵ The Lusaka interviews elicited responses that are consistent with the existing literature on obstacles to behavior change. Both Zambian and expatriate respondents noted similar obstacles. The people of Zambia are poor and inhibited by cultural practices such as widow cleansing and dry sex.⁸⁶ They are threatened by stigmas attached to HIV/AIDS and condom use.⁸⁷ Women are oppressed.⁸⁸ Most people are afraid to know their status.⁸⁹ Their responses were especially consistent when talking about rural communities, with which they did not work directly.

⁸⁰ Appendix contains a complete list of organizations interviewed. In the following footnotes organizations are referenced by their number on this list.

⁸¹ Reference Appendix for numbers 2, 7, 8, 11, 12.

⁸² Reference Appendix for numbers 6, 7.

⁸³ Reference Appendix for numbers 4, 6.

⁸⁴ Reference Appendix for numbers 6, 9.

⁸⁵ Reference Appendix for numbers 7.

⁸⁶ Reference Appendix for numbers 2, 4, 9, 13.

⁸⁷ Reference Appendix for numbers 2, 4, 5, 6, 8, 9, 12.

⁸⁸ Reference Appendix for numbers 1, 5, 6, 7, 9, 10, 11, 12, 13.

⁸⁹ Reference Appendix for numbers 3, 4, 6, 8, 9, 10.

In Ndola the focus of the organizations interviewed was more operational. While these organizations still focused on IEC,⁹⁰ helping people get tested,⁹¹ and the ABC model,⁹² They also assisted those living with HIV/AIDS,⁹³ managed the massive number of orphans,⁹⁴ and addressed communication problems between individuals and families.⁹⁵ Responses to questions about what is impacting behavior change in Ndola generally repeated those in Lusaka, but also included day-to-day obstacles. Responses such as alcohol abuse and inadequate male participation in HIV/AIDS programs were especially common.⁹⁶

In the shantytowns of Chingola the overall HIV/AIDS situation is notably much more desperate and prevention efforts more challenged than in Lusaka and Ndola. Again, respondents report many of the same obstacles to behavior change among their clients, but again more day-to-day obstacles were cited, in greater frequency than first reported in Ndola. Responses such as gender inequalities, poverty, alcohol abuse, transactional sex and promiscuity were given in the majority of interviews.⁹⁷ These are discussed in further detail below.

In Chingola virtually all organizations visited had no day-to-day resources for operation, no one was getting paid, most were volunteers, many did not have their own center and had to rent church halls, meet in schools, or even under a shade tree. Overall, the resource disparity between urban and rural areas is noteworthy. In suburban and rural areas, the simple availability of an inexpensive bicycle, allowing organizations to conduct door-to-door visits, can have a major impact on the success of their efforts. Furthermore, lacking even such simple record-keeping tools such as pens and paper, many

⁹⁰ Reference Appendix for numbers 15, 17, 19.

⁹¹ Reference Appendix for numbers 14, 15, 17.

⁹² Reference Appendix for numbers 14, 17.

⁹³ Reference Appendix for numbers 16, 17, 19.

⁹⁴ Reference Appendix for numbers 19.

⁹⁵ Reference Appendix for numbers 19.

⁹⁶ Reference Appendix for numbers (19, 20, 23, 24); (14, 15, 18, 20, 23).

⁹⁷ Reference Appendix for numbers (29, 31, 33, 34, 36, 37, 38); (25, 26, 30, 31, 33, 34, 35, 36, 38, 39); (25, 31, 33, 34, 36, 38, 39); (25, 26, 30, 33, 34, 36, 38, 39); (31, 32, 34, 35, 36, 38, 39).

organizations keep virtually no records. In my estimation, resource deprivation makes it impossible for these organizations to carry out prevention initiatives as they were intended.

I also observed a disparity between what the formal program design of the various organizations in Ndola and Chingola areas outline and what the implementers actually do in efforts to meet those goals. In Lusaka, organizations have a formal philosophy, program objectives, intervention strategies, and identified target audiences. Implementers in Lusaka seem to have no significant problems executing their programs in line with their stated objectives. While all the organizations in Ndola and Chingola have similar goals outlined on paper (and sometimes on the walls), executing their interventions as planned seems much more difficult. Implementers in suburban areas were not just educating people about the strategies for HIV prevention; they also had to assist people in carrying out what those tenets profess. Many counselors reported regularly standing in as marriage counselors, breaking up sometimes violent fights, or performing other triage duties as individuals struggle to change their behavior.

While prevention programs in Lusaka or elsewhere may contend with similar issues, in my observation those in the Ndola and Chingola are more likely to be intimately involved with the members of their community and its development on the whole. At this level, implementers are also members of their communities, are more familiar and are thus exposed to deep-rooted levels of individual challenges to implementing behavior change. While we lack data to evaluate the relative effectiveness of interventions in Lusaka, Ndola and Chingola, it seems clear that interveners in the smaller communities feel compelled to be more intimately involved in a broader array of interventions.

Yet another general observation related to the overall economic situation is the local level incorporation of Income Generating Activities (IGAs) into HIV/AIDS program design. In Ndola and Chingola 14 of the 26 (54 percent) organizations interviewed reported engaging in income generating activities. Some use IGAs to sustain

the HIV program itself, while others use them more broadly to support the community. 98 For example, in Chingola the Kabundi Basic School HIV/AIDS prevention program has several small IGAs, one of which is making building bricks. Some of the bricks are sold on the market, and others are being used for sale on the market, to enclose a field nearby to provide a safe place for children to play after school.

The New Vision Concept Program in Kapisha has organized communal farming, pig and chicken rearing IGAs to provide employment for members of the community as well as income for the program. The New Vision Program has never been funded by any outside organization yet has managed to clean up and unite much of the community. In these cases, programs contribute to the well being of their communities, as a means of supporting their HIV intervention programs while reducing economic obstacles to behavior change.

In Ndola several organizations reported having programs to teach people (mostly women) the skills necessary to run small business on their own. 99 Savior Faire organizes workshops on how to manage simple retail businesses and reports having trained approximately 125 people. These individuals were divided into five groups working on collective business efforts. Three of the five are reportedly running coffin-building and weaving operations successfully. Some programs have attempted to use IGAs to address more specific poverty driven obstacles to behavior change, such as prostitution and alcohol abuse. Unfortunately, implementers do not believe these efforts have met with much success.

2.2 SOCIAL OBSTACLES TO BEHAVIOR CHANGE

The number of socially related responses was the highest of all four categories with 65 (36 percent) of the total responses. I disaggregate social factors into three factors and one sub-category of factors (see Table 1 below). These individual factors are weakened communal governance mechanisms, lack of leadership/mentoring, and gender roles. The sub-category of sexual practices includes dry sex, sexual cleansing, and lack of

⁹⁸ Reference Appendix for numbers 15, 16, 17, 19, 20, 22, 23, 24, 26, 27, 31, 34, 38, 39.

⁹⁹ Reference Appendix for numbers 15, 16, 17.

communication between men and women over sexual and family planning matters. These traditional sexual practices, which have been widely cited in the literature, were identified as obstacles to HIV prevention by 38 percent (15 of 39) of the total organizations interviewed.

Strikingly, the breakdown of local communal governance mechanisms (i.e., institutions that sustain community cohesion and define socially acceptable behaviors for its members), rarely addressed in the literature, was cited as an obstacle to effective HIV prevention by approximately two thirds of the organizations (29 of 39). Furthermore, weakness of communal governance mechanisms responses accounted for 74 percent of social factors cited by respondents, while traditional sexual practices accounted for only 26 percent.

Respondents explained that ineffective communal governance mechanisms provide no support individual behavior change, nor sanctions for failure to modify behavior in response to HIV education because social support mechanisms do not adequately reinforce the imperative of individual behavior. Those interviewed identified two specific causal pathways from weakened communal mechanisms to increased risky behavior. According to respondents, the weakening of communal governance mechanisms on the Copperbelt has led to a decline in effective leadership and mentoring at the local level, particularly for youth. It also has created an imbalance in gender roles.

These two variables increase the likelihood of risky sexual behavior and exposure to HIV in both men and women (see figure 1) because individuals lack the appropriate social foundations they would receive from structured leadership and mentoring as well as balanced and defined gender roles. This foundation and reinforcement is needed to help individuals choose safer practices. Of the 11 organizations that stated weakened communal governance mechanisms as an obstacle, 73 percent also cited lack of leadership/mentoring, gender roles or both as the intervening variable(s) that lead(s) to high risk of HIV infection.

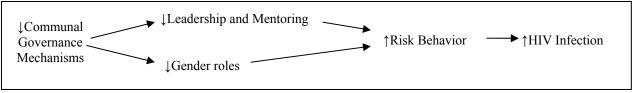


Figure 1. Social Causal Chain

2.2.1 Weak Communal Governance Mechanisms

This category is composed of what I have called weak communal governance mechanisms, inadequate leadership/mentoring, and imbalanced gender roles. Weak communal governance mechanisms include responses related to the perceived decline of traditional self-governance mechanisms, social norms, social security, and judicial institutions. Respondents believe that these community structures have lost much of their historical capacity to provide security, protection, guidance and a sense of purpose to members of the community, resulting in a decline in trust, and participation in community governance.

Respondents perceive the resultant lack of community cohesion as an obstacle to implementing both community and individual level HIV interventions. Particularly in Ndola and Chingola, respondents suggested that a deterioration of the community's social norms and community support in raising children has undermined individual's life and coping skills, especially now that most family organizations in these areas are broken. Many families are expanding beyond the capabilities of a household due to the addition of orphans and abandoned or sick relatives. Respondents felt that the community was failing to find ways to meet these impositions on the household.

Inadequate leadership/mentoring refers to the perceived decline of traditional education and mentoring within the community. Sixteen of 39 (41 percent) organizations interviewed suggested that a lack of community leadership and mentoring is contributing to individuals' disregard for their own safety and the safety of others. As a result, respondents noted a general frustration and sense of hopelessness amongst community members. The response rate for Lusaka was 54 percent (7 of 13 organizations), while that for Ndola was 36 percent (4 of 11 organizations), and that for Chingola was 33 percent (5 of 15 organizations). In the context of inadequate leadership/mentoring, initiation was

mentioned by eight organizations (21 percent). Many expressed anxiety over the welfare of the next generation, which is perceived to have less social support than previous generations as a result of the abandonment of initiation and the decline of elder mentoring. Implementers generally called for the restructuring of traditional initiation rituals to meet modern challenges, working with those who conduct initiations to develop new methods of initiation. Implementers would like to see mechanisms for instilling greater measures of individual accountability and responsibility, particularly in men. 100

Imbalanced gender roles encompasses the lack of legal rights for women, the preferential treatment of men in society, and the power imbalance in relationships between men and women. This factor encompasses responses about general female subordination in personal relationships and communities, including the lack of education and job opportunities, lack of property rights, divorce rights, etc. Although often stated in terms of gender inequality, the obstacles embedded in gender relations were generally similar to those identified under weak communal governance mechanisms and inadequate leadership/mentoring for youth. Gender inequality has long been a fact of life on the Copperbelt. However, with the decline of communal governance mechanisms for maintaining a balance in the roles and responsibilities of men and women have eroded, depriving women of important social protections. As in the case of the other elements of this category, the erosion of communalism has been particularly devastating because national level institutions, which in principle supersede local institutions, remain extremely weak and largely irrelevant to individuals' strategies of survival on the Copperbelt.

Overall, 54 percent (21 of 39 organizations) believe that gender roles are an obstacle to HIV prevention. This factor was the most commonly cited obstacles in my study. The imbalance in gender roles created due to the weakness of communal governance mechanisms is impacting men and women differently. According to both my observations and the responses of the interviewees, women seem to be more negatively impacted than men, in that women are suffering the repercussions of the imbalance of gender roles more acutely than men. Respondents felt that if women had more rights and

¹⁰⁰ Reference Appendix for numbers 15, 16, 18, 20, 22.

more social equality, then their ability to make better decisions concerning their welfare would increase. In all cases, respondents stressed that empowerment of women is severely constrained by men's refusal to relinquish any of their social power.

At the most general level everyone, young and old, men and women, are caught between an eroding traditional social system and a fruitless state system. However, the weakness of communal governance mechanisms impacts men and women, and older and younger generations in distinct ways. For adult generations, implementers described the lack of mechanisms to resolve community problems and provide counsel to its members. In the absence of formal or informal community problem solving methods, respondents described individuals in despair and frustrated. They are convinced that effective community leadership is critical to fostering cohesiveness and developing cooperation with and support for HIV/AIDS programs. For example, Jesus Cares Ministries, operating in a township of Chingola, attempted to reconstitute an Nsaka (a traditional community counsel composed primarily of male elders) as a way of addressing community problems. But they were unsuccessful because community members could not rely on the Nsaka's authority against formal but ineffective state appointed leaders, such as mayors and city council members.

The weakness of communal governance is also impacting the social development of younger generations, according to respondents. They believe that the weakening of traditional communal child rearing techniques has resulted and reckless behavior among youth. Implementers voiced concerns over increasingly early sexual experimentation and teen sexual promiscuity, which they attribute to peer pressure and a lack of constructive activities. Most of the organizations interviewed have outreach programs for youth, designed to provide role models, general sex education, and specific information about HIV and safe sexual behavior. However, many are based in schools and do not reach the many children and teens who are unable to attend school.

Respondents believe that reinvigorated initiation and mentoring practices are needed because it is during these periods of maturation that youth receive critical leadership and education about adult obligations and their roles within their communities. Organizations are also attempting to work with traditional healers and advisors to develop

new syllabi for initiations. But unfortunately, while this cooperation would seem an effective solution to properly educating and initiating children, the effects are limited because many families lack the funds to pay for initiation and advising. As a result, children are left to take their guidance solely by the examples set in the day-to-day behaviors of the adults around them. As the respondents affirm throughout this study, and by my observations, the examples appear to be mostly negative.

2.2.2 Traditional Sexual Practices

The literature on HIV infection in Africa frequently cites a catchall category of "traditional practices" as an obstacle to behavior change. 101 Two such practices, dry sex and widow cleaning, were cited by respondents in my study. Interestingly these cultural factors, the most often identified in the literature, were the least commonly cited obstacles in my interviews. Sexual cleansing was given as a response by just 4 of 39 organizations (10 percent) and dry sex was given by 2 of the 39 organizations (5 percent) both of which were in Lusaka. Three of the four times sexual cleansing was mentioned, references were made to widow cleansing. The other one was related to people "having heard" that sexual cleansing with virgins to cure diseases, including HIV, still occurred. This low number of responses suggests that despite being widely cited in the literature these factors are not a major obstacle to controlling HIV.

In Zambia, as in much of Africa, Western styles of medicine are practiced together with a system of traditional medicine and healing. Traditional healers, usually women, are referred to as fimbusa and are very highly respected in their communities. I was fortunate to have an interview with six fimbusa, some of whom undertook a day's walk to meet me, and who were very serious about giving their side of the story. These are the women who initiate primarily young girls, educate and prepare them for marriage,

¹⁰¹In this study, "traditional sexual practices" primarily refers to dry sex, sexual cleansing and widow cleansing. Dry sex consists of a woman placing herbs and other substances in the vagina to make it dry and hot to increase the sexual pleasure of the man. Sexual cleansing incorporates the practices of widow cleansing and sexual cleansing of diseases. Widow cleansing requires a woman to have intercourse with a relative of her deceased husband so as to rid her of bad spirits associated with his death. Sexual cleansing of diseases is the belief that intercourse with a virgin will cure an individual of his ailments.

conduct rituals, and counsel those in need. These activities are how the fimbusa make their living, so people desiring their services have to have the ability to pay.

These fimbusa are responsible for over 10 districts in the region and have traveled as far as Lusaka upon request for their services. During our discussion, they stressed that they had done a great deal to incorporate safer sexual practices into their teachings, indicating that several years ago they had modified or dropped the aforementioned practices because they imposed the threat of HIV infection. The fimbusa report they are telling women to adopt alternate cleansing rituals, such as rubbing mealie-meal on the face, to replace the traditional forms of sexual cleansing. They are also teaching women that wet sex is the body's natural way and dry sex is not only painful but increases the risk of HIV infection. They believe that the older practices may occur in very isolated communities, but have been largely abandoned. These reports suggest that organizations identifying traditional sexual practices as an ongoing obstacle to HIV (all but one of which are located in Lusaka), may be out of touch with developments in the rural areas.

Finally, lack of communication includes responses related to the inability of men and women to discuss sexual desires, safe sex, and family planning, as well as how to and who should communicate with their children about sexual matters. Twenty eight percent (11 of 39) of the organizations argued that women and men's inability to discuss sexual matters, which they see as "a part of culture," is an obstacle to HIV prevention. This 'traditional sexual practice' remains strong throughout the region. The organizations interviewed reported this as one of the most difficult factors to address.

The apparent reduction in risky traditional sexual practices as a significant obstacle to behavior change, and the growing cooperation between HIV prevention programs and traditional educators/healers in the Copperbelt is noteworthy. It suggests that where leadership exists, in this case from fimbusa and HIV program implementers, progress can be made in altering sexual behavior conducive to HIV infection. I was not able to meet with any men responsible for the initiation of young boys. However, the fimbusa stated they had made attempts to work with their male counterparts but without

much success. Many were concerned that the older men conducting the initiations were actually contributing to risk behavior by continuing to promote unprotected sex as the final right of passage.

 Table 1.
 Social Responses

Social Responses	We Me	Z	ଦୁ	Se	xual Prac	tices
	Weak communal Mechanisms	No Leadership/Mentoring	Gender Roles	Dry Sex	Sexual Cleansing	Lack of Communication
T TICATZA						
LUSAKA	<u>\</u>	I	37		I	
US-DAO PEPFAR COORDINATION			X			
PACT-ZAMBIA		X			X	
JHPIEGO		X				
MARCH PROJECT					X	
PEACE CORPS	X	X	X			
CIDRZ-ZAMBIA			X			
CORRIDORS OF HOPE/FHI	X		X			
US-DAO DoD HAPP		X				
PCI			X	X	X	
CDC/GLOBAL AIDS PROGRAM-ZAMBIA		X	X			X
CHAMP		X	X			
CHAMP WORKING GROUP	X	X	X			X
TRADITIONAL CONSULTANT, Maximina Mwale			X	X		
NDOLA NDOLA						
NDOLA DISTRICT MANAGER, PLNG & DEV						
ZAMSIF-CRAIDS		X	X		X	X
SAVIOR FAIRE						
HOPE HUMANA-ZAMBIA						
REP OF ZA, COPPERBELT PROVINCE, PLANNING		X				X
CATHOLIC DIOCESE INTEGRATED AIDS PROGRAMME	X		X			
COTLAN PROGRAM		X	X			X
NZP						
ISUBILO PLWA	X	X	X			
ISUBILO COMMUNITY RESOURCE CENTER			X			
TWAPIA HIV/AIDS YOUTH ADVOCACY	X					
CHINGOL	∠ A		•			
DISTRICT HIV/AIDS TASK FORCE						X
WILSON'S ORPHANAGE AND STREET KIDS CTR		X				
KABUNDI BASIC SCHOOL HIV/AIDS OUTREACH	X					
NCHANGA HBC						
CHINGOLA SECRETARIES ASSOCIATION			X			X
COPPERBELT TRADITIONAL COUNSELORS	X	X				X
NEW VISION CONCEPT	X		X			
NEW VISION YOUTH COORDINATORS						
JESUS CARES MINISTRIES		X	X			
TUSEKWAFYE HIV/AIDS			X			
SOCIETY FOR FAMILY HEALTH- NEWSTART PROGRAM			1			
ISENI MULTIFUNCTIONAL CENTER		X	X			X
CHINGOLA HIV/AIDS + LIVING			X			X
MUTENDA HIV/AIDS AND HBC	X	X	X			X
KALILO HBC AND HIV/AIDS CMTY	X			1		
PERCENTAGE OF ORGANIZATIONS RESPONDING	Λ					
TERCENTAGE OF ORGANIZATIONS RESPONDING	28%	41%	54%	5%	10%	28%
NUMBER OF TOTAL RESPONSES (65)	11	16	21	2	4	11
PERCENTAGE OF TOTAL (183)	6%	9%	12%	1%	2%	6%

2.3 ECONOMIC OBSTACLES TO BEHAVIOR CHANGE

Arguments that tie lack of behavioral change to the general economic conditions of the region accounted for 27 percent of total responses, second to social factors (36 percent). Fifty four percent of organizations interviewed in Lusaka and Ndola (13 of 24) combined, and 73 percent of organizations in Chingola (11 of 15) cited some aspect of poverty as an obstacle to effective HIV prevention. This category is disaggregated into four factors: poverty generally, unemployment, alcohol abuse, and transactional sex (see Table 2).

Generally, implementers believe that economic conditions constrain the ability of individuals to change their sexual behavior in response to HIV education, which is consistent with the existing literature. Those interviewed identified two specific causal pathways (presented in Figure 2) from poverty and/or unemployment to increased risky behavior. According to respondents, high levels of poverty and male unemployment on the Copperbelt have led to increased alcohol abuse by men and increased transactional sex by women, each of which increases risky sexual behavior and exposure to HIV. Of the 17 organizations that stated poverty, unemployment or both as an obstacle to behavior change, 77 percent also cited alcohol abuse, transactional sex or both as the intervening variable(s) that lead(s) to high risk of infection.

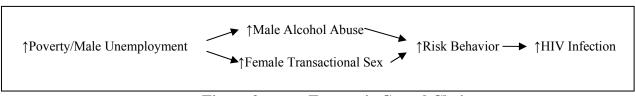


Figure 2. Economic Causal Chain

2.3.1 Poverty

The number of organizations citing poverty generally as an obstacle to behavior change increased from 1 of 13 organizations (8 percent) in Lusaka, to 3 of 11 (27 percent) organizations in Ndola, and 10 of 15 (67 percent) organizations in Chingola. This suggests the increasing importance of this factor from the urban to more rural areas of the region. Poverty, as defined by those interviewed, includes such factors as not having enough food, income to pay for education, medical needs, and transportation. In

general poverty was referred to as the common state of being poor and not having consistent income or means to provide for families. This response of poverty was given by 36 percent of the organizations interviewed, and accounted for 29 percent of the responses given in the economic conditions category. Of the 14 poverty responses given, 79 percent also gave alcohol abuse, transactional sex or both as a subsequent response.

2.3.2 Unemployment

Unemployment was not widely cited as an obstacle to behavior change, accounting for only 15 percent of the organizations and 12 percent of responses in the economic conditions category. It was cited twice in Lusaka (5 percent), once (8 percent) in Ndola, and 3 times (20 percent) in Chingola. Those who cited unemployment generally referred to male unemployment. When asked to elaborate on how unemployment affects behavior change in men, several organizations stated that persistent unemployment had increased tendencies to seek immediate gratification. In their view, the notion that working hard now will result in a prosperous future does not exist on the Copperbelt, because experience suggests otherwise. With no real hope for future prosperity, individuals feel there is no reason to practice safe sex.

2.3.3 The Impact of Alcohol Abuse

Implementers consistently cited alcohol abuse as a factor affecting male behavior change, stating that it was overwhelmingly men who abused alcohol in their communities. Like poverty generally, alcohol abuse was much more commonly cited in Ndola and Chingola than in Lusaka. In Lusaka, this response is given only twice (15 percent), by Peace Corps representatives who spend a significant amount of time in rural areas, and by the US DAO Department of Defense Attaché who was working on HIV/AIDS prevention in the Zambian military. She cited alcohol abuse and use of prostitutes as two of the largest obstacles to behavior change due to the "military culture." Four of 11 organizations (36 percent) in Ndola considered alcohol abuse an obstacle to behavior change, as did 6 of 15 organizations (40 percent) in Chingola. Again, the higher response rate outside Lusaka may indicate that alcohol plays a large role in

blocking behavior change in the more rural areas. Interviewees agreed that the men who spent a lot of time in bars were less likely to consider condom use and more likely to engage in extra-relational sex than those who stayed out of the bars. The increasing number of younger boys frequenting bars is also of mounting concern to program implementers. They argue that those boys who cannot go to school are instead putting themselves at risk by passing their time in bars.

2.3.4 Transactional Sex

Implementers consistently described women engaging in transactional sex primarily as a means of survival. For the purposes of this study, transactional sex is much broader than just the traditional concept of prostitution. It is defined as engaging in sexual acts for the primary purpose of financial betterment and/or survival, and includes prostitution for cash, acquiring male patrons to meet subsistence needs, and occasionally trading sex for immediate needs (such as a ride into town, or a meal). Respondents believe that if women had other options for income generation, most would not engage in this activity. They consistently maintained that women and girls are often left with little choice but to engage in transactional sex to provide for themselves or their families in light of their male head of household's inability to provide and the absence of other economic opportunities. Sixteen of 39 organizations interviewed (41 percent) thought that transactional sex prevented women from engaging in safer sexual practices. This response accounted for 33 percent of the 49 responses in the economic conditions category. The number of organizations identifying transactional sex as an obstacle to behavior change ranged from 27 percent in Ndola, to 38 percent in Lusaka, and 53 percent in Chingola.

Respondents also report an increasing concern for young girls who have little opportunity to stay in school without the means to pay the fees. Many are finding their way into bars and becoming exposed to HIV infection by sleeping with older men, sometimes in the hopes of receiving food or a little bit of money, or quite simply as a way of entertaining themselves. This mirrors a similar concern implementers had with those boys who also could not afford to go to school passing their time in bars drinking.

As was the case with social obstacles, the causal pathways by which economic obstacles block behavior change are heavily influenced by gender roles. It appears as if, in this case study, the obstacles for women are magnified by the obstacles for men. The decay of communal governance institutions, which would otherwise provide checks on appropriate behavior as economic circumstances change, allows men to neglect their obligations to the household and community, including the obligation to provide income. Consequently, women are more likely to engage in transactional sex for economic survival. What is common to both men and women is that engaging in risky behaviors appears to be a method for coping with destitute economic situations.

 Table 2.
 Economic Responses

Table 2. Economic Response	S			
Economic Responses	Poverty	Unemployment	Alcohol abuse	Transactional sex
<u>LUSAKA</u>		ı	ı	ı
US-DAO PEPFAR COORDINATION	X			
PACT-ZAMBIA				X
JHPIEGO		X		
MARCH PROJECT				
PEACE CORPS		X	X	
CIDRZ-ZAMBIA				
CORRIDORS OF HOPE/FHI				X
US-DAO DoD HAPP			X	X
PCI				
CDC/GLOBAL AIDS PROGRAM-ZAMBIA				X
СНАМР				
CHAMP WORKING GROUP				X
TRADITIONAL CONSULTANT, Maximina Mwale				
<u>NDOLA</u>		ı	ı	ı
NDOLA DISTRICT MANAGER, PLNG & DEV				
ZAMSIF-CRAIDS				X
SAVIOR FAIRE	X			
HOPE HUMANA-ZAMBIA				
REP OF ZA, COPPERBELT PROVINCE, PLANNING				
CATHOLIC DIOCESE INTEGRATED AIDS PROGRAMME			X	X
COTLAN PROGRAM	X		X	
NZP				
ISUBILO PLWA				
ISUBILO COMMUNITY RESOURCE CENTER	X		X	
TWAPIA HIV/AIDS YOUTH ADVOCACY		X	X	X
DISTRICT HIV/AIDS TASK FORCE	V	1	37	37
WILSON'S ORPHANAGE AND STREET KIDS CTR	X	V	X	X
KABUNDI BASIC SCHOOL HIV/AIDS OUTREACH	X	X		X
NCHANGA HBC				
CHINGOLA SECRETARIES ASSOCIATION COPPERBELT TRADITIONAL COUNSELORS	v	v		v
NEW VISION CONCEPT	X	X	V	X
NEW VISION CONCEPT NEW VISION YOUTH COORDINATORS	X	X	X	
JESUS CARES MINISTRIES	X		v	v
TUSEKWAFYE HIV/AIDS	1		X	X
SOCIETY FOR FAMILY HEALTH- NEWSTART PROGRAM	X X	-	X	X
ISENI MULTIFUNCTIONAL CENTER	X	-	X	X
CHINGOLA HIV/AIDS + LIVING	Λ	1	Λ	Λ
MUTENDA HIV/AIDS AND HBC	X	-	X	X
KALILO HBC AND HIV/AIDS CMTY	X		X	X
PERCENTAGE OF ORGANZIATIONS RESPONDING	36%	15%	33%	41%
NUMBER OF TOTAL RESPONSES (49)	14	6	13	16
PERCENTAGE OF TOTAL (183)	8%	3%	7%	9%

2.4 PREVENTION PROGRAMS

The third category of responses concerns issues of program design and implementation, what I call prevention program related factors. Responses in this category account for 18 percent of the 183 responses collected. Response rates for this category were largely consistent across the three locations: 54 percent of the organizations in Lusaka mentioned at least one program factor as an obstacle to behavior change, as did 73 percent in Ndola, and 53 in Chingola.

This category consists of three factors: the effects of information campaigns that focus solely on the negative impact of HIV/AIDS, insufficient counseling mechanisms, and low levels of male participation in HIV/AIDS prevention programs. Figure 3 below outlines the causal chain described by the organizations interviewed. In general, it is their view that the failure of prevention program design to meet the specific needs of participants leads to a reduction in male participation in prevention interventions, an increase in participants' exposure to negative reinforcement of HIV/AIDS messages, and handicaps implementers' abilities to properly counsel participants. Because of these, there is an overall increase in risk behavior, further exposing individuals to HIV infection.

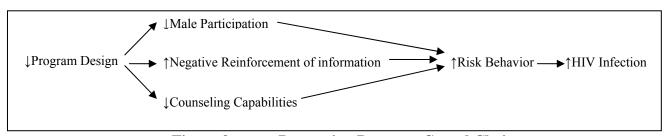


Figure 3. Prevention Program Causal Chain

2.4.1 IEC and Program Backlash

Thirty-three percent of the organizations interviewed argued that there is actually a negative reaction among participants against the messages in education campaigns, which in turn makes them reluctant to face test results about their infection status. I categorized responses that got at various aspects of this dynamic as the "negative reinforcement of IEC and serostatus knowledge," and found that these types of answers

accounted for the largest number of responses (41 percent) in the program-related category. In arguing that the educational campaigns themselves had negative effects, the interviewees indicated that the constant barrage of negative messages (HIV = AIDS = death), made people reluctant to gain more knowledge about the disease, to attempt to treat it when infected, and, finally, afraid to disclose their own serostatus to family, friends and the community.

The negative reinforcement of serostatus knowledge included perceptions that people behave more recklessly if they know they are HIV positive; that there are repercussions to being known as HIV+ (factors especially acute among women, who fear being beaten, divorced, or killed for being HIV+), and the general stigma associated with the isolation and maltreatment of people who are identified as HIV+. Therefore, people are less likely to allow themselves to be tested, which further spreads the disease. Negative reactions to the content of the programs themselves and a reluctance to gain knowledge of one's own serostatus are not directly addressed by the literature on the HIV prevention programs, making the high numbers of responses surprising.

Implementers feel the messages need to evolve towards more proactive messages relating to the importance of not getting infected, or living positively with HIV/AIDS. Because of the negative reinforcement, several organizations reported program participants engaging in *increased* unsafe sex in response to the severity of the messages from prevention programs, which they believe lead people to conclude that they are more than likely infected and "doomed." With this rationale, individuals therefore have nothing to lose and do not see the benefits associated with safe sexual practices, choosing instead to experience as much "pleasure" as possible. Finally, not knowing their serostatus with certainty provides the deniability of possibly infecting someone else.

Some implementers also insist that HIV prevention messages are instilling fear to the point that individuals do not want to know their serostatus: people do not want to know that they are going to suffer the horrible mortal consequences HIV/AIDS. These fears of the repercussions of knowing their serostatus are also keeping individuals from disclosing their status to their mates. Implementers believe that men do not want to know or disclose their status for fear of appearing weak, and women do not want to know or

disclose their status for fear of being beaten or divorced. Interestingly, all of the contributing factors to IEC backlash such as individuals feeling of hopeless and disease fatigue, have been mentioned to some degree throughout the literature, but not been directly attributed to HIV prevention intervention messages. This may be an indication of the overly negative nature as well as the broad need for more positive and supportive characteristics to messages.

2.4.2 Counseling Factors

One implication of the previous factor is that more attention needs to be given to helping participants cope with the information being delivered. Yet there are problems with the counseling side of the prevention programs as well as with the informational components. Responses from implementers concerning counseling factors accounted for 22 percent of the total responses for the program-related category. Of the 39 organizations 7 (18 percent) noted that their counseling abilities were underdeveloped, they lacked expertise beyond initial counseling methods, and they were ill equipped or had no specific programs to counsel couples and families. Counseling responses were defined by participants as poor training for counseling those who are having continuing problems implementing safer practices; the lack of comprehensive follow-up counseling structured into the program design; and the need for formalized methods to counsel couples and families.

Participants noted that counseling programs are currently structured to provide participants only one or two counseling sessions before or after testing. They believe this to be inadequate. In addition, implementers believe counselors are not adequately trained to undertake the more extensive counseling that is required for effective HIV control. Implementers feel the need for greater counseling mechanisms to support both HIV positive and HIV negative clients so that they can help individuals develop the responsible behavior associated with their serostatus. Furthermore, currently most counseling is designed for individuals who come in for testing, leaving decisions regarding disclosure and inclusion of others in counseling up to that individual, which leaves partners are greater risk of infection.

Peer educators primarily associated with home based care (HBC) programs expressed concern with the lack of training for counseling families. For example, the Nchanga Home Based Care program in Chingola has been working to counsel entire families rather than just the infected individual. Their peer educators described the difficulty and time it takes to work toward open dialogue with the family, but suggested that once they get them to come together and understand, both patients and counselors see positive results, a visible acceptance of treatment and attempts to implement safer practices as a family. While they are doing the best they can with the training they have, implementers feel they could be much more effective with a formal program and training for approaching families.

2.4.3 The Inadequate Participation of Men

Implementers expressed strong sentiments concerning the inadequate participation in HIV/AIDS prevention programs, particularly in the Ndola and Chingola areas. Inadequate male participation was defined as men's refusal to participate in HIV prevention programs, as well as the lack of specific program design targeting men. As presented in Table 3, 12 organizations (31 percent) cited the inadequate male participation in prevention programs as an obstacle to behavior change. Only 1 organization mentioned it in Lusaka (8 percent), 6 in Ndola (55 percent), and 5 in Chingola (33 percent), which suggests that this may be less of a problem in the capital city.

Respondents reported that men claim to "have better things to do" even when it is obvious that they do not, or simply "can't be bothered with such things." Those who provide HBC or conduct door-to-door peer education campaigns said the largest obstacle to their effectiveness was the stubbornness of and consequent difficulty in reaching out to men. They further note that men are uncooperative, sometimes to the point of violence, when program staff members attempt to engage them individually or as the head of household. This coupled with prevention programs' lack of a comprehensive interventions targeting men, as there is for women, leads implementers to argue that prevention programs are ineffective at fostering male participation.

Respondents report that women are generally more willing to participate in programs and work through the difficulties than men, and that women receive more support through programs associated with antenatal care and prevention of mother-to-child transmission programs. Furthermore, implementers report that their clients are almost exclusively female, and mostly HIV positive. Female participants are contributing in IGAs to grow food, raise chickens or pigs, selling charcoal, or making handicrafts to sell. Most organizations interviewed included men in leadership positions, but, particularly at the community-level, the staff of counselors, peer educators, and home-based care providers consists almost exclusively of women. Program heads are beginning to see the need for more male counselors, which they hope will facilitate more effective "man to man" outreach. However, almost all the organizations lacked directives or initiatives for targeting men.

Hope Humana-Zambia in Ndola was the only organization interviewed that had an initiative specifically targeting men, the "Real Man in the Fight Against HIV/AIDS Contest." Various workplaces around Ndola registered five men each, to compete in various categories such as an HIV/AIDS knowledge test, an obstacle course, a physical fitness test, sporting events, and an HIV/AIDS role model speech. In their first year they had many groups participate. The man who won was a columnist for the local paper, who has since written extensively about HIV/AIDS in his column, and become a good community role model and spokesperson for HIV/AIDS prevention. Hope Humana intends to run the contest every year and hopes that his shoes will be continuously refilled - the first winner has certainly set the bar high in their eyes.

Inadequate male participation in programs as either implementers or participants brings the discussion back to the impact gender roles have on individual decision making. In this case, programs are primarily comprised of female implementers. Men may be reluctant to learn from women, or to participate in activities such as IGAs that are generally perceived to be women's responsibilities. It may be more efficacious to target men with gender specific interventions to increase their engagement with HIV control. Increases in participation may lead to an increase in the number of male implementers needed to provide effective male-specific outreach.

On a more positive note, interviews with youth peer education program coordinators suggest that younger men may be much more inclined to participate in the fight against HIV than their elders. While still led mostly by teenaged boys, the participants were evenly divided between boys and girls. Youth respondents reported the number of youths joining their support groups and programs is growing more rapidly than they can control, and that while there are still many challenges to teens trying to exercise safe sexual practices, there is dialogue and individuals are making efforts to overcome the challenges. Two young men from the New Vision Concept Youth Program reflected on the generation gap between their peers and their parents. "Parents don't understand about HIV...we are understanding that we need to do different from our parents." 102

All youth groups said their programs were working to develop the correct mindset about safe sex. Drama skits, songs, and messages designed by the groups for peer education put forth that abstinence until marriage is important for a healthy relationship, not just for protection from HIV; that faithfulness develops trust as well as protects from HIV; and that condoms keep girls from getting pregnant while at the same time protecting against HIV. Youth coordinators report that these powerful messages are resonating with their peers and are responsible for drawing large numbers to join. The positive proactive messages this youth group is implementing with some success provide an example of the difference between these and the common messages of the devastating effects of HIV/AIDS. Future messages in this vein may be the kind needed to overcome the backlash problems notes with current IEC interventions.

¹⁰² Reference Appendix for number 32.

Table 3. Prevention Program Responses

Table 3. Prevention Prog	gram Responses		
<u>Prevention Program Responses</u>	Negative Reinforcement of IEC and Serostatus Knowledge	Counseling Factors	Inadequate Male participation
LUSA	KA		•
US-DAO PEPFAR COORDINATION			
PACT-ZAMBIA			
JHPIEGO	X		
MARCH PROJECT	X	X	X
PEACE CORPS		X	
CIDRZ-ZAMBIA	X		
CORRIDORS OF HOPE/FHI			
US-DAO DoD HAPP	X		
PCI	X		
CDC/GLOBAL AIDS PROGRAM-ZAMBIA	X		
CHAMP			
CHAMP WORKING GROUP			
TRADITIONAL CONSULTANT, Maximina Mwale			
NDOI	Γ.Δ		
NDOLA DISTRICT MANAGER, PLNG & DEV			X
ZAMSIF-CRAIDS			X
SAVIOR FAIRE			Α
HOPE HUMANA-ZAMBIA	X		
REP OF ZA, COPPERBELT PROVINCE, PLANNING	A	X	X
CATHOLIC DIOCESE INTEGRATED AIDS PROGRAMME		X	Λ
COTLAN PROGRAM		Λ	X
NZP			Λ
ISUBILO PLWA			X
ISUBILO COMMUNITY RESOURCE CENTER			X
TWAPIA HIV/AIDS YOUTH ADVOCACY			Λ
CHING	OI A		
DISTRICT HIV/AIDS TASK FORCE	<u>OLA</u>	1	
WILSON'S ORPHANAGE AND STREET KIDS CTR			
	V		
KABUNDI BASIC SCHOOL HIV/AIDS OUTREACH	X	v	
NCHANGA HBC	V	X	N/
CHINGOLA SECRETARIES ASSOCIATION	X		X
COPPERBELT TRADITIONAL COUNSELORS			
NEW VISION CONCEPT			
NEW VISION YOUTH COORDINATORS			
JESUS CARES MINISTRIES			
TUSEKWAFYE HIV/AIDS			X
SOCIETY FOR FAMILY HEALTH- NEWSTART PROGRAM			
ISENI MULTIFUNCTIONAL CENTER	X		X
CHINGOLA HIV/AIDS + LIVING	X	X	X
MUTENDA HIV/AIDS AND HBC	X		X
KALILO HBC AND HIV/AIDS CMTY	X	X	
PERCENTAGE OF ORGANIZATIONS RESPONDING	33%	18%	31%
NUMBER OF TOTAL RESPONSES (32)	13	7	12
PERCENTAGE OF TOTAL (183)	7%	4%	7%

2.5 MISCELLANEOUS RESPONSES

This final section includes miscellaneous responses given by participants concerning stigmas and misinformation associated with several aspects of HIV/AIDS, individual stubbornness concerning condom use, and promiscuity. These responses were placed in a miscellaneous category because they did not fall into my other three categories and were too few to support additional categories. Nevertheless, the quantity of responses overall is high enough to merit brief discussion.

This category accounted for 20 percent of responses overall. It is comprised of three factors: HIV/AIDS infection myths and stigma, condom use stubbornness and reluctance, and general promiscuity. HIV/AIDS myths refers to the lack accurate knowledge about how HIV infection occurs, how it behaves in the body, and how treatments work. This factor also includes myths and stigmas concerning condom use to include the belief that using condoms are physically harmful or reduce manliness. Reluctance to use condom is comprised of lack of desire to use condoms due to reduction in physical pleasure, lack of use of condoms in avoidance of trust and faithfulness concerns, and the belief that condoms may in fact promote promiscuity in youths and are therefore not promoted by some organizations. Promiscuity is self-explanatory and applies to both men and women.

Of the 39 organizations, 31 percent reported that the myths and stigma surrounding HIV/AIDS continue to act as a barrier to behavior change. Implementers noted that individuals know how HIV is transmitted, and how to protect themselves from infection. But peer educators and counselors feel challenged with educating people about the more detailed aspects of the virus, such as how HIV acts in the body. For example, several respondents reported difficulties in helping infected couples understand why they still need to use protective measures even when both people are HIV+. The Peace Corps reported that some men in outlying areas believe that circumcision protects them from HIV, while implementers in Tusekwafye township of Chingola report still trying to convince some men that HIV/AIDS cannot be "cured." In other words, despite the high numbers of people who claim on surveys that they "know" about HIV, how it is transmitted and how it can be prevented, they may not actually *understand* the information that has become rote.

Reluctance to use condoms was identified by 28 percent (11 or 39) of the organizations as an obstacle to adoption of safer sexual practices. Implementers noted considerable difficulties convincing men to use condoms and to do so correctly. Respondents reported that men simply preferred the feeling of "natural sex" and wanted "maximum pleasure." In other instances, participants were reluctant to use condoms because doing so raised issues of trust for both the man and the woman.

Promiscuity was consistently associated with men, and attributed to their social gender roles and meeting the definition of masculinity. Promiscuity was given by 36 percent (14 of 39) of the organizations interviewed as an obstacle to behavior change. Chingola had the highest response rate with seven of the twelve organizations (47 percent) raising promiscuity as a concern, and Ndola the lowest (18 percent). Five of 13 organizations in Lusaka (39 percent) considered promiscuity an obstacle. Promiscuity was the most commonly cited factor in this category; however respondents had a difficult time relating it as an obstacle to behavior change beyond individuals making the personal decision to have multiple partners. Implementers also noted this was a growing problem amongst youth and attributed this obstacle to the lack of guidance and education, which is similar to their responses in the social category.

All three of these factors have been considered hindrances to behavior change in the literature presented in Chapter I. The responses from the program implementers, who feel that many individuals still lack an adequate understanding of HIV/AIDS is contrary to findings in the literature that very high percentages of the population have the requisite knowledge about HIV/AIDS. This may suggest that individuals can regurgitate information provided, but do not really understand the messages and therefore fail to translate information into behavior change. The high number of responses concerning a continuing lack of condom use may also require further attention. Convincing individuals who have made up their minds not to use condoms may require new intervention strategies for peer educators.

Table 4. Miscellaneous Responses

Table 4. Miscellaneous Respor	ises		
Miscellaneous Responses	Z F E	Condom Use Deterrence/ Stubbornness	Pr
	HIV/AIDS Infection Myths/Stigma	Condom Use Deterrence/ Stubbornness	Promiscuity
	tion	lon Trei	usc -
	DS n Stig	ı U ıce	l üt
	ma	se / ess	y
LUSAKA			
US-DAO PEPFAR COORDINATION			
PACT-ZAMBIA		X	X
JHPIEGO			
MARCH PROJECT		X	X
PEACE CORPS	X		
CIDRZ-ZAMBIA	X		
CORRIDORS OF HOPE/FHI			
US-DAO DoD HAPP	X	X	
PCI	X	X	X
CDC/GLOBAL AIDS PROGRAM-ZAMBIA			
CHAMP			X
CHAMP WORKING GROUP	X		X
TRADITIONAL CONSULTANT, Maximina Mwale			
NDOLA		l.	<u> </u>
NDOLA DISTRICT MANAGER, PLNG & DEV			
ZAMSIF-CRAIDS		X	
SAVIOR FAIRE	X		
HOPE HUMANA-ZAMBIA			
REP OF ZA, COPPERBELT PROVINCE, PLANNING			X
CATHOLIC DIOCESE INTEGRATED AIDS PROGRAMME			
COTLAN PROGRAM			
NZP	X		X
ISUBILO PLWA			
ISUBILO COMMUNITY RESOURCE CENTER		X	
TWAPIA HIV/AIDS YOUTH ADVOCACY			
CHINGOLA		l.	
DISTRICT HIV/AIDS TASK FORCE	X		
WILSON'S ORPHANAGE AND STREET KIDS CTR		X	
KABUNDI BASIC SCHOOL HIV/AIDS OUTREACH		X	
NCHANGA HBC	X		
CHINGOLA SECRETARIES ASSOCIATION			
COPPERBELT TRADITIONAL COUNSELORS			
NEW VISION CONCEPT			X
NEW VISION YOUTH COORDINATORS	X		X
JESUS CARES MINISTRIES		X	
TUSEKWAFYE HIV/AIDS	X		X
SOCIETY FOR FAMILY HEALTH- NEWSTART PROGRAM			X
ISENI MULTIFUNCTIONAL CENTER			X
CHINGOLA HIV/AIDS + LIVING		X	_
MUTENDA HIV/AIDS AND HBC	X	X	X
KALILO HBC AND HIV/AIDS CMTY	1		X
PERCENTAGE OF ORGANIZATIONS RESPONDING	31%	28%	36%
NUMBER OF TOTAL DECRONGES (27)			
NUMBER OF TOTAL RESPONSES (37) PERCENTAGE OF TOTAL (183)	12 7%	11 6%	14 8%
I ENCENTAGE OF TOTAL (103)	/ /0	0/0	0/0

III. CONCLUSION AND RECOMMENDATIONS

It is important to note that this study is exploratory. The data gathered is insufficient to support concrete conclusions, but does suggest new avenues for future research. Overall, my interviews with HIV prevention organizations in the Copperbelt region of Zambia suggest that grassroots HIV prevention program implementers feel compelled to design intervention strategies that are well outside the confines of program design, in order to address community-level obstacles to behavior change. More research is required to determine whether these broad-based local interventions are actually more efficacious than nationally or internationally designed programs, and thus deserving of greater support from national and international organizations.

The dedication of implementer in these areas is impressive. Many make extraordinary efforts to help those who will let them. In Ndola and Chingola, organizations are contending with matters that go well beyond the narrow focus of the HIV/AIDS program designs. Social and economic conditions impact the implementers' ability to focus strictly on HIV/AIDS prevention with program participants. Thus interventions in Ndola and Chingola tend to be both more communally oriented, since individuals' problems are considered community problems. They are more personalized, often involving, door-to-door outreach.

Many respondents felt that proactive door-to-door initiatives were more effective than those that rely on participants taking the initiative to come to the organization. In particular, they felt their door-to-door effectiveness was due to the privacy this method offered, the ability to target entire families, as well as the ability to attempt addressing men. Implementers are also helping people with food and shelter; working with individuals to overcome communication constraints; coming to the aid of wives dealing with drunken belligerent husbands; supporting widows who are put out on the street by their husband's families; and are constantly working to find fosters for orphans, etc. as well as implementing program design. Ironically, the organizations that are attempting to do the most generally are the least well funded.

Funding priorities and distribution are a concern. The clear disparity between the operational capacity of organizations in the cities and larger towns and those in suburban shantytowns and rural areas is particularly problematic. My interviews suggest that training and coordination could help in addressing this misdistribution of resources. The District HIV/AIDS Task Force in Chingola reported that the applications it receives from local organizations often do not meet the funding prerequisites handed down by higher levels. Grassroots program managers also confessed to being unfamiliar with the application process. As a result, funding goes disproportionately to those organizations in town that are better able to communicate regularly with the District leadership.

Where funding is limited, higher level organizations should work to develop linkages with complementary programs at the local level. Some local programs reported being unable to get their participants tested, while testing centers were overstocked with testing kits and having difficulty meeting testing goals. In one instance we were able to put two of these organizations in contact so they could work together to meet each other's deficiencies. In the other instance, the HBC center was too far away from the testing center; however, mitigating the transportation issue is now under consideration. Higher level organizations may not be aware of these types of obstacles to effective program implementation. Furthermore, prerequisites for funding distribution may not allow for funding to solve these types of concerns. Those HIV/AIDS organizations responsible for funds distribution need to consider developing better inter-organization communication and cooperation at the grass-roots level to make more effective use of funds.

3.1 IMPLICATIONS FOR RESEARCHERS

The realities of program implementation at the local level deserve more study and consideration for intervention design. This group of implementers at the grassroots level appears to be largely overlooked in the literature, but my research suggests that their understanding of the HIV/AIDS pandemic and the appropriate responses to it diverges significantly from those of higher level organization representatives and policymakers. Not only do they see the need for broader interventions, but they tend to identify obstacles to behavior change that are different from those indicated in the literature and reported by national and international organizations. For example, where the literature

and national level implementers suggest that "traditional practices" continue to put individuals at risk, local implementers and the fimbusa responsible for the promulgation of such practices suggest that such practices have been largely abandoned in response to HIV education. Meanwhile, local level implementers emphasize an alternative set of social obstacles to behavior change, one that has received scant attention at higher levels.

The insights of local program implementers suggest that as long as broader community needs are not met by programs designed at higher levels, significant behavioral change will remain elusive. Implementers in Chingola consistently noted a broader array of obstacles to individual behavior change than did those in Lusaka. In most cases, those in Ndola did as well. Implementers at the local level appear to have much more intimate relationships with program participants, and also to identify many more social and economic obstacles to effective HIV prevention. According to respondents, their priority needs are outside the constraints of ABC design. HIV cannot be controlled without more significant interventions to deal with deeper social and economic challenges.

3.1.1 Social and Economic Obstacles to Behavior Change?

Social factors are perceived to be a more significant obstacle to behavior change than economic factors. The particular social factors identified by respondents in Ndola and Chingola consistently relate to the breakdown of communalism, rather than exotic sexual practices. The focus of the academic literature on practices such as sexual cleansing and dry sex may therefore be misplaced. My exploratory research suggests that these types of practices are being adapted in response to the threat of HIV/AIDS, rather than functioning as causes that initiated the crisis.

Although they were less commonly cited, economic obstacles to behavior change are also perceived to be significant, particularly because of their contribution to risk behaviors via alcohol abuse and transactional sex. Most of the organizations that gave poverty as a response also gave alcohol abuse, transactional sex or both as a subsequent response. While programs attempt to address alcohol abuse and transactional sex, they are also attempting to address the root cause of those behaviors. Understanding that

individual's economic situation would more than likely not change soon, in an effort to incorporate community development, implementers attempted to rally participation and support via IGAs and other program interventions. For example, Wilson's Orphanage has been trying to get unemployed men to support their IGAs by working as watchmen to safeguard the farms from theft in exchange for some of the food grown. Unfortunately, implementers there were unable find people because men wanted cash not food (in their view to go buy beer).

Still, program implementers' responses suggest that targeting economic factors may not be as effective as targeting development of local leadership and mentoring. While poverty and unemployment are having a significant impact, what respondents feel are more appropriate solutions in the short-term are those that address social factors. Referencing the above example, the implementers at Wilson's Orphanage felt like there were no repercussions for the men's behavior, no voice telling them the appropriate thing to do is to support the community. The implementers felt they had no credibility to convince individuals to change their behavior.

Finally, respondents consistently identify gender-specific manifestations of both social and economic obstacles to behavior change. Gender roles in their view are a fundamental obstacle to effective HIV prevention. This is evident in the social roles explored in the social responses category; in the alcohol abuse and transactional sex factors associated with poverty responses; and in the counseling and lack of male participation factors associated with prevention program responses. Referring to the three causal chains, in each case a separate path presented itself for women and men.

3.1.2 Gender-based Interventions: Not Just a Women's Issue

We desperately need to improve our understanding of how men are impacted by weakened economic and social structures and how they respond to the HIV/AIDS pandemic itself, and accordingly need to design prevention interventions that directly target men. In my study, the impact of prevention efforts is limited by the inadequate male participation in programs as well as male resistance to behavioral change. Thus, gender specific interventions need to target men at least as much as women. Most HIV

prevention programs recognize the imbalance in gender roles, and target interventions to support women's empowerment as a means of HIV prevention. By neglecting the male side of the equation, however, the programs fail to meet the needs of their female participants. Women know about HIV/AIDS, are participating in HIV/AIDS programs, but their ability to implement behavior change remains constrained by men. More study is needed as to how to give men the incentives to participate in programs in order to get at the crux of the HIV epidemic.

3.2 POLICY RECOMMENDATIONS

Unfortunately, PEPFAR's Five Year Strategy for Zambia does not address any economic obstacles contributing to the inability of individuals to change their behavior toward the ABC model it proudly utilizes. However, there are several initiatives to target social obstacles identified in this study. "...dissolving myths surrounding HIV and traditional practices....Stigma reduction and gender equality are two areas aggressively addressed....supporting community structures that positively influence social and community norms...." While some of these obstacles have been reaffirmed by this study, others such as traditional practices have not.

Designers of PEPFAR have incorporated into their plan initiatives to increase overall leadership and to target high risk men such as truck drivers and soldiers. While a good start, my research, which highlights the potential benefits of targeting all men and not just those considered high risk, indicates that the PEPFAR programs do not go far enough. Prioritizing male participation will help to address many more factors impeding male behavior change rather than focusing on just those associated with high risk groups; for example, being able to meet the socially accepted requirements of "man" within their respective communities. The effects of the overall economic crisis may have created a sense of male emasculation, but finding the means to give men community and familial responsibility and accountability can come from smaller efforts including those associated with HIV/AIDS prevention programs.

¹⁰³ State Department. Office of the United States Global AIDS Coordinator. *The President's Emergency Plan for AIDS Relief: US Five-Year Strategy for Zambia*. December 2004, 9.

HIV prevention program designs should develop creative strategies to encourage men to assume more responsibility and leadership. The realities and the magnitude of HIV/AIDS may need to be addressed by both formal and informal community leaders. In the implementation of narrower HIV interventions and broader community development projects, this approach would need to consider which methods best integrate relevant aspects of male gender roles. With this in mind programs might provide the incentive men need to participate and contribute to overcoming common obstacles in their communities.

Carrying out such an agenda undoubtedly will be difficult- particularly since men tend to be hostile to HIV/AIDS prevention efforts and all they entail. But implementers at the grass roots agree that HIV/AIDS prevention programs could contribute to such an effort. For example, one community did attempt to reconstitute the practice of gathering the elder men of the community together to discuss how to deal with some of the challenges they are facing due to HIV/AIDS. In the end, they failed as a result of logistical problems, such as getting the word out, securing a place to meet, and fostering community support. These are areas where higher-level HIV/AIDS organizations could help communities overcome obstacles by broadening their approaches.

Ultimately, program designers need to understand the specific needs of their target populations. Interventions should be developed according to what the community says it needs rather than a broad model which may not be useful to them. HIV/AIDS prevention in the areas I visited had little to do with ABC; it had everything to do with trying to establish some sort of social order and well-being first. Thus, policymakers need to reconsider such factors as those presented here when developing their HIV/AIDS prevention program designs.

Grassroots counselors, peer educators, and home-based care providers are not qualified to deal with the types of problems they deal with day to day. Most peer educators and counselors have first- to second tier- training comprising mostly of information dissemination and answering fundamental questions about HIV/AIDS. None have the training for mediating marital relations or dealing with hostile individuals, much less the training as to how to answer the more complicated questions that arise as people

look more and more to implementers for help. Policymakers may want to consider a phased approach for program design to allow for interventions to continue to improve and address new obstacles as they arise.

Program developers need to consider whether more general program designs which incorporate community development may be more effective that strict focus on ABC requirements. As funding for HIV/AIDS programs is often limited and tied to those who demonstrate initiatives based on the ABC model, funding for lesser but often more important areas of the programs are overlooked- such as requisitions for sheets of tin used for IGA chicken coops, or funding to build meeting halls.

Local implementers believe that when HIV prevention programs incorporate comprehensive measures which in include both social, economic and preventative elements, such as community development and IGAs, along with the ABC and other messages about behavioral change, they are more successful. They appear to have found a way to integrate both individual and group support mechanisms to decrease dangerous behaviors. More prevention programs may want to consider this type of hybrid scheme. One chimbusa¹⁰⁴ put it best as she tried to illustrate the severity of the problem HIV/AIDS prevention is up against. She said that trying to get people to accept ABC is like trying to put a roof on a house with only two walls built on quicksand. There first needs to be a solid foundation of rock for the walls to rest on and stay stable; once all four walls are built, then and only then with the roof stay on. Roughly translated the foundation of rock are economy and security, the walls are build of social structures such as family, schools, and community unity, and then and only then can the ABC roof fit snuggly on top as a guarantor and supporter of strength and safety.

¹⁰⁴ In Bemba, chimbusa is the singular form of fimbusa.

THIS PAGE LEFT INTENTIONALLY BLANK

APPENDIX: NUMBERIC ORGANIZATIONAL REFERENCE CHART

1	Eda Lifuka/Cristina Garces
	PEPFAR Coordinators
	US-DAO
2	Kenny Simamuna/Jack Kalipenta
	Managers
	PACT-ZAMBIA
_	Rick Hughes
3	Country Director, Africa
	JHPIEGO Joy Banda
4	MARCH Project
	Oliver Kanene/Susan Mwanza
5	Assoc Director/Crisis Coordinator
'	PEACE CORPS
6	Dr. Elizabeth Stringer
	CIDRZ-Zambia
7	Joseph Kamanga
	Technical Director
	CORRIDORS OF HOPE/FHI
	Lt Col Leslie Bryant
8	US-DAO
	DoD HAPP
9	Benny Njobvu
	Project Manager
	PCI
	Dr. Mark Shields
10	Chief, Strategic Information Branch
	CDC/GLOBAL AIDS PROGRAM-ZAMBIA
	Rosanna Price-Nyendwa
11	Anthony Morrison
	Program Director/Operations Director CHAMP
	CHAMP WORKING GROUP
12	~ 20 participants
	Maximina Mwale
13	TRADITIONAL EDUCATION CONSULTANT
	NDOLA
	Dr. Nyendua
14	DISTRICT MANAGER
	Planning and Development
15	Vera Mbewe
	Regional Facilitator
	ZAMSIF-CRAIDS
16	P.C. Kamwale
	Director
	SAVIOR FAIRE
17	Wendy and Nala
1 /	Hope Humana-Zambia
10	Esnart Mpokosa
18	PROVINCIAL PLANNER
	Copperbelt Province, Republic of Zambia
19	Simon Fikansa
	Programme Manager, Catholic Diocese, Ndola INTEGRATED AIDS PROGRAMME
20	Mr. Lungu Nkwazi Shantytown
20	COTLAN Program
	CO 12.11 Trogram

21	Peter and Todi NZP
22	Alfred Kwenda Isubilo PLWA
23	Gilbert Muwansa ISUBILO COMMUNITY RESOURCE CENTER
24	TWAPIA HIV/AIDS YOUTH ADVOCACY ~25 high school + aged youths
	CHINGOLA
25	District HIV/AIDS Task Force
	4 committee members
26	WILSON'S ORPHANAGE AND STREET KIDS
	CTR
	~ 8 committee members
	Mashekwa Collins
27	Deputy Head
2'	KABUNDI BASIC SCHOOL
•	Chrispen Beezalwali
	President
28	NCHANGA HBC
	~ 15 members
	Catherine Bwalya
29	CHINGOLA SECRETARIES ASSOCIATION
	~10 members
	Copperbelt Chimbusas
30	TRADITIONAL COUNSELORS
	6 Chimbusa
	Benson Kalumba
31	Kapisha
	NEW VISION CONCEPT
	~30 committee members
	Moses (17) and Gift (19)
	NEW VISION YOUTH COORDINATORS Mrs. Chilolo
33	JESUS CARES MINISTRIES
	11 committee members
34	Steven Chivale
	Chairman
	TUSEKWAFYE HIV/AIDS
35	Esther Banda
	Newstart site Manager
	SOCIETY FOR FAMILY HEALTH
	Moses Mweemba
36	Coordinators
	ISENI MULTIFUNCTIONAL CENTER
37	Mr. And Mrs. Chola
	CHINGOLA HIV/AIDS + LIVING
38	~30-40 participants
	MUTENDA HIV/AIDS AND HBC
39	Percy Tingisa Chairman, NHC/Moses, Director HIV/AIDS program
39	KALILO HBC AND HIV/AIDS CMTY
	KALILO IIDO AND III V/AIDS CWI I

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF REFERENCES

Abera, Zenabu. 2003. Knowledge, Attitude and Behavior (KAB) on HIV/AIDS/STDs among Workers in the Informal Sector in Addis Ababa. *Ethiopian Journal of Health Development*, 17(1): 53-61. Available at <a href="http://www.cih.uib.no/journals/EJHD/ejhdv17-no1/e

Agha, S. 2002. Declines in Casual Sex in Lusaka, Zambia: 1996-1999. *AIDS*, 16(2): 291-293.

Albarracin, D., Kumkale, G.T., Johnson, B.T. 2004. Influences of Social Power and Normative Support on Condom Use Decisions: A Research Synthesis, *AIDS Care*, 16(6): 700-723.

Allain, JP, Anokswa, M.; Casbard, A., et al. 2004. Sociology and Behaviours of West African Blood Donors: The Impact of Religion on Human Immunodeficiency Virus Infection. *Vox Sanguinis*, 87(4): 233-240.

Amaro, Hortensia. 1995. Love, Sex, and Power: Considering Women's Realities in HIV Prevention. *American Psychologist*, 50(6): 437-447.

Barker, G. & Ricardo, C. June 2005. Young Men and the Construction of Masculinity in Sub-Saharan Africa: Implications for HIV/AIDS, Conflict, and Violence. he World Bank Social Development Papers #32712.

Barnett, Tony; Whiteside, Alan. June 2002. *Poverty and HIV/AIDS: Impact, Coping and Mitigation Policy in AIDS*, Public Policy and Child Well-Being (Florence; UNICEF-IRC).

Barroso, Carmen. 2005. *Gender, Youth, and AIDS*. United Nations Division for the Advancement of Women. Available at http://www.un.org/womenwatch/daw/egm/bpfamd2005/experts-papers/EGM-BPFA-MD-MDG-2005-EP.4.pdf accessed May 2006.

Baylies, C. 2004. HIV/AIDS And Older Women In Zambia: Concern For Self, Worry Over Daughters, Towers Of Strength. *Global Health And Governance: HIV/AIDS*, Third World Quarterly Series, 161-185.

Benotsch, E.G. et al. 2004. HIV Prevention in Africa: Programs and Populations Served by Non-Governmental Organizations. *Journal of Community Health*, 29(4): 319-336.

Blanc, Ann K. 2001. he Effect of Power in Sexual Relationships on Sexual and Reproductive Health: An Examination of the Evidence, *Studies in Family Planning*, 32(3): 189-213.

Bollinger, L, Cooper-Arnold, K., Stover, J. 2004. Where are the Gaps? The Effects of HIV-Prevention Interventions on Behavioral Change. *Studies in Family Planning*, 35(1): 27-38.

Booysen, F. le R. 2003. *HIV/AIDS and Poverty Dynamics*. Department of Economics, RSA, Working Paper 01/03: 1.

Bowleg, L., Lucas, K.J., Tschann, J.M. 2004 "The ball was always in his court": An Exploratory Analysis of Relationship Scripts, Sexual Scripts, and Condom Use Among African American Women. Psychology of Women Quarterly, 28: 70-82.

Brown, B.M. *Measuring HIV/AIDS Stigma* (University of Cape Town: Center for Social Science Research, AIDS and Society Research Unit, August 2004).

Buve, Anne; Bishikwabo-Nsarhaza, Kizito; Mutangadura, Gladys. 2002. AIDS in Africa: The Spread and Effect of HIV-1 infection in Sub-Saharan Africa, *Lancet*, 359: 2011-2017.

Centers for Disease Control, *HIV/AIDS Prevention Research Synthesis Project*. *Compendium of HIV Prevention Interventions with Evidence of Effectiveness*. Atlanta, GA: Centers for Disease Control and Prevention November 1999, Revised 2001. Available at http://www.cdc.gov/hiv/pubs/hivcompendium/hivcompendium.htm accessed May 2006.

Centers for Disease Control.2004. *HIV Prevention in the Third Decade: Activities of the CDC's Divisions of HIV/AIDS Prevention*. United States: Centers for Disease Control and Prevention. Available at http://www.cdc.gov/hiv/HIV_3rdDecade/default.htm accessed May 2006.

Dowsett, G.W. 2003. Some Considerations on Sexuality and Gender in the Context of AIDS, *Reproductive Health Matters*, 11(22): 21-29.

Dunkle, Kristin L., Jewkes, Rachel K., et al. 2004. Gender-Based Violence, Relationship Power, and Risk of HIV Infection in Women Attending Antenatal Clinics in South Africa,

Lancet, Vol 363, Issue 9419: 1415-1421.

Farmer, Paul. 2001. Community-Based Approaches to HIV Treatment in Resource-Poor Settings, *Lancet*, 358: 404-409.

Fleischman, Janet. *Breaking The Cycle: Ensuring Equitable Access to HIV Treatment for Women and Girls* (Washington DC: Center for Strategic and International Studies, February 2004).

Flores, R., Gillespie, S. 2001. *Health and Nutrition: Emerging and Reemerging Issues in Developing Countries*, 2020 Vision Focus 5, International Food Policy Research Institute (IFPRI).

Fournier, A.M., Carmichael, C. May 1998. Socioeconomic Influences on the Transmission of Human Immunodeficiency Virus Infection: The Hidden Risk. *Archives of Family Medicine*, 7: 214-217. Available at http://archfami.ama-assn.org/cgi/content/full/7/3/214 accessed May 2006.

Garbus, L., Marseille, E. 2003. *HIV/AIDS in Uganda*. AIDS Research Institute, AIDS Policy Research Center; San Francisco, CA: 26-27. Available at http://ari.ucsf.edu/programs/policy/countries/Uganda.pdf accessed September 2006.

Garbus, Lisa. March 2003. *HIV/AIDS in Zambia*. AIDS Policy Research Center, University of California San Francisco, 24. Available at http://ari.ucsf.edu/programs/policy/countries/Zambia.pdf accessed May 2006.

Gausset, Quentin. 2001. AIDS and Cultural Practices in Africa: The Case of the Tonga (Zambia), *Social Science & Medicine*, 52: 509-518.

Gazel, J., Naidoo, P. April 2004. Striking the Rock with Impunity: The Consequences of Gendered Practices in 21st Century Sub-Saharan Africa, Rockefeller Foundations, Working Paper #280.

Government of the Republic of Zambia. Zambia Millennium Development Goals 2003. Lusaka.

Green, Gill et al. 2001. Female Control of Sexuality: Illusion or Reality? Use of Vaginal Products in South West Uganda. *Social Science and Medicine*, Vol 52:585-598.

Groenewold, G., Hutter, I., van Ginneken, J., de Bruijin, B. 2005. *Poverty, Gender and Psychosocial Dimensions of Safe Sex Behaviour of Women in Zambia*, Paper presented at the XXV International Population Conference: International Union for the Scientific Study of Population, Tours, France, 2005.

Halperin, Daniel T. et al. 2004. he Time Has Come For Common Ground on Preventing Sexual Transmission of HIV, *Lancet*, 364: 1913-1915.

Hanson, S. September 2003. Editorial: How To Bridge The Gap Between Policies And Implementation- Is Effective AIDS Control Presently Possible In Sub-Saharan Africa? *Tropical Medicine and International Health*, 8(9): 765-766.

Hughes-d'Aeth, A. 2002. Evaluation of HIV/AIDS Peer Education Projects in Zambia. *Evaluation and Program Planning*, 25(4): 398.

LaFraniere, Sharon. 11 May 2005. AIDS Now Compels Africa to Challenge Widows' Cleansing. *New York Times*.

Lawoyin, T. Men Make A Difference. Culture, HIV/Aids And Men's Risks And Responsibilities, Ibadan, Nigeria, University College Hospital, College of Medicine. Working Paper available at

http://www.scholar.google.com/url?sa=U&q=http://www.dakar.unesco.org/pdf/010808_c ommunication12.pdf accessed May 2006.

Logan, T.K., Cole, J., Leukefeld, C. 2002. Women, Sex, and HIV: Social and Contextual Factors, Meta-Analysis of Published Interventions, and Implications for Practice and Research, *Psychological Bulletin*, 128(6): 851-885.

Macintyre, K., Brown, L., Sosler, S. 2001. "It's not what you know, but who you knew": Examining the Relationship Between Behavior Change and AIDS Mortality in Africa. *AIDS Education and Prevention*, 13(2): 160-174.

Macintyre, K., Rutenberg, N., Brown, L., et al. 2004. <u>Understanding Perceptions of HIV Risk Among Adolescents in KwaZulu-Natal</u>, *AIDS AND Behavior*, 8(3): 237-250 accessed August 2005.

Mayaud, P., Mabey, D. June 2004. Approaches to the Control of Sexually Transmitted Infections in Developing Countries: Old Problems and Modern Challenges, *Sexually Transmitted Infections*, 80(3): 174-182.

Merson, M.H., Dayton, J.M., O'Reilly, K. 2000. Effectiveness of HIV Prevention Interventions in Developing Countries. *AIDS*, 14(2, Supp): S68-84.

Mulango, J.R.S. 2001. Sexual Cleansing (Kusalazya) and Levirate Marriage (Kunjilila mung'anda) in the Era of AIDS: Changes in Perceptions and Practices in Zambia. *Social Science & Medicine*, 53(3): 371-382.

Mwanamwenge, M.T., Chilopa, B., Chewe, P.M., et al. March 2004. Zambia Sexual Behaviour Survey 2003. Republic of Zambia, Central Statistical Office, 1; Garbus, 6; Human Development Index, 2003. Available at http://hdr.undp.org/statistics/data/indicators.cfm?x=1&y=1&z=1 accessed October 2005.

Ndubani, P., Hojer, B. 2001 Sexual Behaviour and Sexually Transmitted Diseases Among Young Men in Zambia. Health Policy and Planning, 16(1): 107-112.

Ndubani, P. et al. 2003. Understanding Young Men's Sexual Health and Prospects For Sexual Behaviour Change in Rural Zambia. *Scandinavian Journal of Public Health*, 31(4): 291-296.

Ogunbodede, Eyitope O. 2004. HIV/AIDS Situation in Africa. *International Dental Journal*, 54: 352-360.

Opio, A.A. et al. 2000. Changes in HIV/AIDS Prevention Indicators in the Rural District of Lira in Uganda, *AIDS*, 14(10): 1461-1463.

Parker Richard G., Easton, Delia, Klein, Charles H. 2000. Structural Barriers and Facilitators in HIV Prevention: A Review of International Research, *AIDS*, 14(sup 1): S22-S32.

Parker, R. 2003. Sexuality, Culture, and Power in HIV/AIDS Research. *Annual Review of Anthropology*, 30: 163-179.

Poundstone, K. E., Strathdee, S. A., Celentano, D. D. July 2004. The Social Epidemiology of Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome, *Epidemiologic Reviews*, 26(1): 25-26.

Russell, Sabin. 24 Feb 2005. Uganda's HIV Rate Drops, But Not From Abstinence: Study Concludes Basis of Bush Policy Apparently Irrelevant, *SF Chronicle*.

Schoofs, M., Zimmerman, R. 9 July 2002. Sexual Politics Drive AIDS Epidemic: Though Women Are Infected More Often, Men Are Impetus In Virus Spread, Reports Say. *Wall Street Journal (Eastern Edition)*: D.4.

Schoofs, Mark. 1998. The Deadly Gender Gap: Fighting AIDS in Africa Means Convincing Men to Take Responsibility for What is Often Thought of as A Woman's Disease. Available at http://www.thebody.com/schoofs/gender_gap.html accessed May 2006.

Schoofs, Mark. 1999. "AIDS: The Agony of Africa", The Village Voice. Available at http://www.villagevoice.com/specials/africa/ accessed June 2005

Selim, Rasheda. March 2003. Gender Dimensions of Poverty and HIV/AIDS: A Statistical Review of Six Countries. *Department of Policy Journal*: 81-99.

Seshamani, Venkatesh. June 2000. Some Pertinent Considerations in the Formulation of a Poverty Reduction Strategy Paper (PRSP) for Zambia. Civil Society for Poverty Reduction, Zambia.

Slaymaker, E. Dec 2004. A critique of international Indicators of Sexual Risk Behaviour, *Sexually Transmitted Infections*, 80(Sup II); ii13-ii21.

Slaymaker, E., Buckner, B. 2004 Monitoring Trends in Sexual Behaviour in Zambia, 1996-2003. *Sexually Transmitted Infections*, 80(Sup 2): 85-90.

Slonim-Nevo, V., Mukaka, L., Tembo, R. AIDS-related Knowledge, Attitudes and Behavior Among Urban Youths in Zambia- Results From A Pilot Study. *International Social Work*, 44(4): 487-503.

Smith, Laurie A. 2003. Partner Influence on Noncondom Use: Gender and Ethnic Differences, *The Journal of Sex Research*, 40(4): 346-350.

Sumartojo, Esther. June 2000. Structural Factors in HIV Prevention: Concepts, Examples, and Implications For Research, *AIDS*, 14(Sup 1):S3-S10.

Tylor, E. 1871. Primitive culture, (London: John Murray).

Uganda HIV/AIDS Partnership, Uganda Ministry of Health, Uganda AIDS Commission, and MEASURE Evaluation Project. 2004. *AIDS in Africa during the Nineties: Uganda: Young People, Sex, and AIDS in Uganda.* Chapel Hill, NC: MEASURE *Evaluation*, Carolina Population Center, University of North Carolina at Chapel Hill. Available at http://www.cpc.unc.edu/measure/publications/pdf/sr-04-27.pdf accessed May 2006.

United Nations Development Program. *Human Development Report 2005*. Available at http://hdr.undp.org/reports/global/2005/ accessed Aug 2005.

UN Millennium Project. 2005. *Combating AIDS in the Developing World*. Task Force on HIV/AIDS, Malaria, TB, and Access to Essential Medicines, Working Group on HIV/AIDS.

UNAIDS, "AIDS: Epidemic Update", December 2004, Available at http://www.unaids.org/wad2004/EPIupdate2004 html en/epi04 00 en.htm

UNAIDS. July 2004. Facing the Future Together: Report of the Secretary General's Task Force on Women, Girls and HIV/AIDS in Southern Africa. Available at http://www.unaids.org/html/pub/publications/irc-pub06/jc380-facingfuture_en_pdf.htm accessed May 2005.

UNAIDS. September 2004. *UNAIDS at Country Level Progress Report*. Country and Regional Support Department. Available at http://www.unaids.org/NetTools/Misc/DocInfo.aspx?LANG=en&href=http %3a %2f %2fgva-doc-owl %2fWEBcontent %2fDocuments %2fpub %2fPublications %2fIRC-pub06 %2fJC1048-CountryLevel_en %26 %2346 %3bpdf accessed May 2005

USAID. "The ABCs of HIV Prevention". Jan 2004. Available at http://www.usaid.gov/our_work/global_health/aids/News/abcjan04.pdf accessed May 2006.

US State Department. Office of the United States Global AIDS Coordinator. The *President's Emergency Plan for AIDS Relief: US Five-Year Global HIV/AIDS Strategy*. December 2004. Available at http://www.state.gov/documents/organization/29831.pdf accessed May 2006.

US State Department. Office of the United States Global AIDS Coordinator. *Engendering Bold Leadership: The President's Emergency Plan for AIDS Relief, First Annual Report to Congress*. March 4, 2005. Available at http://www.state.gov/documents/organization/43885.pdf accessed May 2006.

US State Department. September 2005. *Background Note Zambia*. Bureau of African Affairs. Available at http://www.state.gov/r/pa/ei/bgn/2359.htm#econ accessed May 2006.

Van Dyk, A.C. 2001. Traditional African Beliefs and Customs: Implications For AIDS Education and Prevention in Africa. *South African Journal of Psychology*, 31(2):60-66.

Vihn-Thomas, P., Bunch, M., Card, J. 2003. A Research-based Tool for Identifying and Strengthening Culturally Competent and Evaluation-ready HIV/AIDS Prevention Programs, *AIDS Education and Prevention*, Vol 15(6): 481-498.

Visser, M.J., Schoeman, J.B. 2004. Implementing A Community Intervention to Reduce Young People's Risks for Getting HIV: Unraveling the complexities, *Journal of Community Psychology*, 32(2): 145-165.

Wiktor, S.Z., Abouya, L., et al. 2004. Effect of an HIV Counseling and Testing Program on AIDS-related knowledge and practices in Tuberculosis clinics in Abidjan, Cote D-Ivoire. The International Journal of TB and Lung Disease, 8(4): 445-450.

Willan, Samantha. 2002. "Women's Empowerment": Africa's AIDS Vaccine? AIDS Analysis Africa, 12(4): 1-20.

Whelan, Daniel. 1999. Gender and HIV/AIDS: Taking Stock of Research and Programs. Geneva: UNAIDS.

World Bank. Zambia: Country Brief. August 2001 as sited in Garbus, 32.

Zambian Ministry of Finance and National Planning. Zambia Poverty Reduction Strategy Paper 2002-2004. Lusaka: March 2002.

THIS PAGE INTENTIONALLY LEFT BLANK

INITIAL DISTRIBUTION LIST

- Defense Technical Information Center Ft. Belvoir, Virginia
- 2. Dudley Knox Library Naval Postgraduate School Monterey, California
- 3. Capt Jana Nyerges
 United States Air Force
 Tucson, Arizona
- 4. Russell Alley
 Hecla Mining Company
 Puerto Ordaz, Venezuela
- Eda Mutale Lifuka
 US Defense Attaché Office
 Embassy of the United States of America
 Lusaka, Zambia
- 6. M. Cristina F. Garces
 Embassy of the United States of America
 Lusaka, Zambia
- 7. Kenny Simamuna Pact Zambia Lusaka, Zambia
- 8. Jack B. Kalipenta Pact Zambia Lusaka, Zambia
- 9. Rick Hughes JHPIEGO Lusaka, Zambia
- 10. Susan Malunga Mwanza Peace Corps Lusaka, Zambia

11. Oliver Kanene Peace Corps Lusaka, Zambia

12. Dr. Elizabeth M. Stringer CIDRZ Lusaka, Zambia

13. Joseph Kamanga FHI-Corridors of Hope Lusaka, Zambia

14. Benny Njobvu Project Concern International Lusaka, Zambia

Dr. Mark Shields CDC Global AIDS Program-Zambia Lusaka, Zambia

16. Rosanna Price-Nyendwa CHAMP Lusaka, Zambia

17. Anthony Morrison CHAMP Lusaka, Zambia

18. Vera Mbewe ZAMSIF-CRAIDS Ndola, Zambia

Esnart C. Mpokosa Republic of Zambia Department of Physical Planning and Housing Ndola, Zambia

20. Simon Chanda Fikansa Catholic Diocese of Ndola Ndola, Zambia

21. Alfred Kwenda NZP+ Ndola, Zambia

22. Gilbert Mowansa Isubilo Community Resource Center Isubilo, Zambia

23. Twapia Advocacy on HIV/AIDS Twapia, Zambia

24. Pastor Elpidious Mulenga Wilson Orphanage and Street Kids Center Chingola, Zambia

25. Chrispen Beezalwali Nchanga HBC Nchanga, Zambia

26. Catherine Bwalya Chingola Secretaries Association Chingola, Zambia

- 27. Chingola Chimbusa Chingola, Zambia
- 28. Jesus Cares Ministries Chingola, Zambia
- 29. Esther Mwilwa Banda Society for Family Health, Newstart Kitwe, Zambia
- 30. Dr. Mada Banda Konkola Copper Mining Chingola, Zambia
- 31. Dr. Janet Sikasote Konkola Copper Mining Chingola, Zambia
- 32. Passmore Hamukoma Konkola Copper Mining Chingola, Zambia
- 33. Sixtus Mulenga Konkola Copper Mining Chingola, Zambia

34. Dr. Vinod Pandey Konkola Copper Mining Chingola, Zambia